PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	103692.0001US4re
	Application Number	
Title of Invention	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1 — Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Yakkov		MERLIN	

Residence Information (Select One) US Residency ● Non US Residency Active US Military Service

City	Country of Residence [i]
Raanana	IL

Mailing Address of Inventor:

Address 1	9 Haeshel Street
Address 2	
City	Raanana
State/Province	
Postal Code	43585
Country [i]	IL

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	24392		
Email Address	patents@fishiplaw.com	Add Email	Remove Email

Application Information:

Title of the Invention	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL		
Attorney Docket Number	103692.0001US4re	**Small Entity Status Claimed**	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	7	**Suggested Figure for Publication (if any)**	

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	103692.0001US4re
	Application Number	
Title of Invention	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	● Customer Number	US Patent Practitioner	◯ Limited Recognition (37 CFR 11.9)
Customer Number	24392		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.
When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status: Patented — Remove

Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
	reissued of	13336189	2011-12-23	9407969	2016-08-02

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	103692.0001US4re
	Application Number	
Title of Invention	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL	

Prior Application Status	Patented				Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
13336189	Continuation of	11794825	2007-07-06	8132220	2012-03-06

Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
11794825	a 371 of international	PCT/IL2005/000035	2005-01-11

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button. Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)[i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Remove

Application Number	Country[i]	Filing Date (YYYY-MM-DD)	Access Code[i] (if applicable)

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button. Add

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	103692.0001US4re
	Application Number	
Title of Invention	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL	

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	103692.0001US4re
	Application Number	
Title of Invention	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL	

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant 1 — Remove

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

● Assignee	Legal Representative under 35 U.S.C. 117	Joint Inventor
Person to whom the inventor is obligated to assign.	Person who shows sufficient proprietary interest	

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor:

If the Applicant is an Organization check here. ☒

Organization Name	TVNGO LTD. (BVI)		
Mailing Address Information For Applicant:			
Address 1	204 Rappenburger Straat		
Address 2	1011 MN		
City	Amsterdam	**State/Province**	
Country	NL	Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button. Add

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	103692.0001US4re
	Application Number	
Title of Invention	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL	

Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

Remove

If the Assignee or Non-Applicant Assignee is an Organization check here. ☐

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		**State/Province**	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. Add

Signature:

Remove

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Robert D. Fish/			Date (YYYY-MM-DD)	2022-07-18
First Name	Robert D.	Last Name	Fish	Registration Number	33880

Additional Signature may be generated within this form by selecting the Add button. Add

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	103692.0001US4re
	Application Number	
Title of Invention	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL	

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1 The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3 A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent CooperationTreaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

Appl No.:	**TBD – Reissue of US9,407,969**
Applicant:	**TVnGo Ltd. (BVI)**
Filing Date:	**December 23, 2011**
Art Unit:	**4164**
Examiner:	**TBD**
Attorney Docket No.:	**103692.0001US4re**
Title	**FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Sir:

This paper provides Preliminary Amendments to the Reissue Application for US9407969, filed herewith. Please enter the amendments shown herein.

- Claim amendments begin on page 2.
- Specification amendments begin on page 7.
- Remarks begin on page 10.

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Amended) A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising:

(a) providing a combiner circuit at the user's premises, wherein:

the combiner circuit is coupled to a TV set and connected to a separate [TV timer box or] TV tuner in the TV set, at the user's premises, and

the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored,

an image indicative of the content associated with said overlay-enabling digital data, and

an [overlay activation criterion] <u>event condition</u>; and

(b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said [activation criterion] <u>event condition</u> is met, wherein generating [an] <u>the</u> overlay includes:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate

a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

2. The method according to claim 1, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user profile.

3. (Amended) The method according to claim 1, further including: receiving a command from [a] the user at said user premises; and responsive to said command, resizing said first portion and/or said second portion of said first display screen.

4. The method according to claim 1, wherein the content stored at said website enables streaming of digital data over the Internet; and

said method further including: pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

5. (Amended) The method according to claim 1, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein said generating [an] the overlay further includes within said first display said one or more second images.

6. The method according to claim 1, wherein the overlay-enabling digital data is supplementary or complementary to the video signals.

7. The method according to claim 1, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

8. The method according to claim 1, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

9. (Amended) The method according to claim 1, wherein said [overlay activation criterion] event condition includes at least one of the following: a timing information or[,] data specifying one or more TV subscriber channels[, a user command information].

Samsung
Ex. 1031 - Page 11

10. (Amended) The method according to claim 5, further including:

periodically accessing a web server for downloading said overlay-enabling digital data;

extracting from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieving and storing digital content from said web sites; and

if the event condition [overlay activation criterion] is met and a user command that is associated with an image from amongst said one or more second images is identified, displaying the respective image from amongst the second images, accessing the respective web site associated with the displayed image and extracting and buffering content from the website.

11. The method according to claim 5, further comprising displaying a respective IP content when a corresponding one of said one or more second images is selected.

12. The method according to claim 7, including selecting specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

13. (Amended) A TV-Internet Integration circuit for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the TV-Internet Integration circuit comprising:

a combiner circuit at [a] the user's premises coupled to a separate TV tuner box or TV tuner,

wherein the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the combiner circuit at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored;

Samsung
Ex. 1031 - Page 12

an image indicative of the content associated with said overlay-enabling digital data; and

an event condition [overlay activation criterion], wherein

the combiner circuit is responsive to [an] the event condition [overlay activation criterion] being met for generating a corresponding overlay, including:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, and generate a second video display screen including at least a portion which corresponds to said content; and

a video output interface, coupled to or integrated within the combiner circuit and configured to be coupled to a video input of said TV set and to display said first display screen or said second video display screen.

14. The TV-Internet Integration circuit according to claim 13, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user-profile.

15. (Amended) The TV-Internet Integration circuit according to claim 13, further including:

a command input for receiving a command from [a] the user at said user premises; and

a frame adjuster for resizing said first portion and/or said second portion of said first display screen in response to said command.

16. The TV-Internet Integration circuit according to claim 13, further including:

a receiver for receiving a digital data stream, wherein the stream of the digital data is enabled by the content stored at said website; and

a processing unit for pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

17. (Amended) The TV-internet Integration circuit according to claim 13, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each

Samsung
Ex. 1031 - Page 13

of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and

wherein the combiner circuit is configured to:

periodically access a web server for downloading said overlay-enabling digital data;

extract from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieve and store digital content from said web sites; and

if the event condition [overlay activation criterion] is met, and a user command that is associated with an image from amongst said one or more second images is identified, display the respective image from amongst the second images, access the respective web site associated with the displayed image and extract and buffer content from the website.

18. The TV-Internet Integration circuit according to claim 13, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

19. The TV-Internet Integration circuit according to claim 13, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

20. (Amended) The TV-Internet Integration circuit according to claim 13, wherein said [overlay activation criterion] event condition includes at least one of the following: a timing information or[,] data specifying one or more TV subscriber channels[, a user command information].

21. The TV-Internet Integration circuit according to claim 18, wherein the icon is colored so as to allow user selection of a specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

SPECIFICATION AMENDMENTS

Please replace the paragraph at col. 3 ll. 39-64 as indicated below with marked and clean copies.

---Marked---

FIG. 1 is pictorial representation showing a mixed broadcast network 10 having a Cable TV Box 11 coupled to a satellite 12 and a Cable TV transmitter 13 for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server 14 via the Internet 15 (constituting a digital data communications network) to a TV-Internet Integration Box 16 (e.g., including a circuit, processor, etc.) for display on a TV set 17 coupled thereto. The TV set 17 may be constituted by a computer having a video card and a high resolution display monitor. However, the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box 16 is connected to the Cable TV Box 11 for combining the broadcast TV signals received by the Cable TV Box 11 with the IP packet data broadcast via the Internet 15. Also shown is an advertiser 18 having a computer coupled to the Internet 15 for downloading advertising content to the web server 14 for storage in a database 19 and a telephone 20 coupled to the TV-Internet Integration Box 16 for feeding telephony signals to the TV-Internet Integration Box 16, which combines the received telephony signals with video data received from the Cable TV Box 11 and/or the Internet 15.

---Clean---

FIG. 1 is pictorial representation showing a mixed broadcast network 10 having a Cable TV Box 11 coupled to a satellite 12 and a Cable TV transmitter 13 for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server 14 via the Internet 15 (constituting a digital data communications network) to a TV-Internet Integration Box 16 (e.g., including a circuit, processor, etc.) for display on a TV set 17 coupled thereto. The TV set 17 may be constituted by a computer having a video card and a high resolution display monitor. However,

the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box 16 is connected to the Cable TV Box 11 for combining the broadcast TV signals received by the Cable TV Box 11 with the IP packet data broadcast via the Internet 15. Also shown is an advertiser 18 having a computer coupled to the Internet 15 for downloading advertising content to the web server 14 for storage in a database 19 and a telephone 20 coupled to the TV-Internet Integration Box 16 for feeding telephony signals to the TV-Internet Integration Box 16, which combines the received telephony signals with video data received from the Cable TV Box 11 and/or the Internet 15.

Please replace the paragraph at col. 6 ll. 48-67 as indicated below with marked and clean copies.

---Marked---

FIG. 5 is a block diagram showing the functionality of the TV-Internet Integration Box 16 shown in FIG. 1. Thus, the TV-Internet Integration Box 16 comprises a first input 21 for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input 22 for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with predefined user-profiles associated with IP packet data and stored in the database 19. A combiner unit 23 (e.g., including a circuit, processor, etc.) is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output 24 is coupled to the combiner unit 23 for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

---Clean---

Samsung
Ex. 1031 - Page 16

FIG. 5 is a block diagram showing the functionality of the TV-Internet Integration Box 16 shown in FIG. 1. Thus, the TV-Internet Integration Box 16 comprises a first input 21 for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input 22 for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with predefined user-profiles associated with IP packet data and stored in the database 19. A combiner unit 23 (e.g., including a circuit, processor, etc.) is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output 24 is coupled to the combiner unit 23 for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

REMARKS

This Preliminary Amendment is filed with Reissued Application for US9407969, issued August 2, 2016. By way of this amendment, original claims 2, 4, 6-8, 11, 12, 14, 16, 18, 19, and 21 are pending, and claims 1, 3, 5, 9, 10, 13, 15, 17, and 20 are amended. The Specification is amended to replace the paragraphs at col. 3 ll. 39-64 and col. 6 ll. 48-67. No new matter is added. Applicant respectfully requests the claims as amended be allowed.

Notice of Related Litigation and Request for Expedited "Special" Handling

Patent US9407969 was the subject of litigation in the District of New Jersey as well as an appeal to the Federal Circuit. Orders from both courts rendered claims 1, 9, 10, 13, 17, and 20 of the '969 Patent invalid as indefinite. The District of New Jersey matter is Civil No. 18-10238 (RMB/KMW). The Federal Circuit matter is Case 20-1837. Pursuant to MPEP 1442, Applicant respectfully requests this matter be taken up for action in advance of other reissue applications.

Amended Claims (Claims 1, 3, 5, 9, 10, 13, 15, 17, and 20)

Claims 1, 3, 5, 9, 10, 13, 15, 17, and 20 are amended herein, with no new matter added.

Claims 1, 3, 5, 13, and 15 are amended to address any apparent defects as to antecedent basis, at least in part. Applicant submits that such amendments cure any defects as to antecedent basis that may exist, and otherwise requests allowance.

Claims 1, 9, 10, 13, 17, and 20 are amended to address concerns raised by Federal Court in the District of New Jersey, and affirmed on appeal to the Federal Circuit. While Applicant respectfully disagrees, both courts found they could not construe claims 1, 9, 10, 13, 17, and 20 because the term "overlay activation criterion" was indefinite. To address this concern, the term "overlay activation criterion" is amended to recite "event condition" with support at col. 4, l. 41 of the issued patent ("upon detecting a matching event" with reference to Figure 3 (showing checking events precedent to whether conditions match). Applicant submits the amended term is supported by the Specification, and requests allowance.

Claim 1 is further amended to remove the term "TV timer box", which is not literally described in the Specification. Applicant submits no new matter is added.

Claims 9 and 20 are further amended to address concerns raised by the New Jersey District court and affirmed by the Federal Circuit. While Applicant respectfully disagrees, both courts found inconsistency between claims 1 and 9, where claim 1 requires the "[overlay activation criterion] event condition" be provided over the Internet, while claim 9 provides the "[overlay activation criterion] event condition" can include "a user command information". The courts determined the Specification limited user command information as provided only by a local, IR remote, and found the inconstancy between Internet provided information and local IR provided information rendered the claims indefinite, with the same conclusion as to claims 13 and 20.

Applicant has amended claims 9 and 20 to remove reference to "a user command information" and submits any inconsistency is thereby cured. Applicant respectfully requests the claims be allowed.

Specification Amendments

The paragraphs at col. 3 ll. 39-64 and col. 6 ll. 48-67 are amended as enclosed herein. Claims 1, 13, and 17 include the term "combiner circuit" while claims 13-21 include the term "TV-Internet Integration circuit", each of which is not literally described in the Specification. However, as the combiner unit and TV-Internet Integration unit described in the Specification receive, interpret, manipulate, and provide digital audio and video data, a PHOSITA would understand such units as including hardware known at the time for performing such tasks, for example circuits and processors. Applicant thus amends the Specification as submitted herein to add the parenthetical that the combiner unit and TV-Internet Integration unit include processors, circuits, etc. No new matter is added.

///

Request For Allowance

Claims 2, 4, 6-8, 11, 12, 14, 16, 18, 19, and 21 as originally issued are pending, and claims 1, 3, 5, 9, 10, 13, 15, 17, and 20 are amended and pending in this application. Applicant requests allowance of all pending claims.

Respectfully submitted,
Fish IP Law, LLP

Date: July 18, 2022

By /Robert D. Fish/
Robert D. Fish, Esq.
Reg. No. 33,880

Fish IP Law, LLP
2603 Main Street, Suite 1000
Irvine, CA 92614-4271
Telephone (949) 943-8300
Fax (949) 943-8358

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

Appl No.:	**TBD – Reissue of US9,407,969**
Applicant:	**TVnGo Ltd. (BVI)**
Filing Date:	**December 23, 2011**
Art Unit:	**4164**
Examiner:	**TBD**
Attorney Docket No.:	**103692.0001US4re**

Title **Forming Overlays At User's Premises And Utilizing Them For Selective Combinations Of Tv Broadcast Channel Format Material And Ip-Format Material**

ATTACHMENT TO PTO/AIA/06 (09-20) // ERROR UPON WHICH REISSUE IS BASED

One error is a federal court found claims 1, 9, 10, 13, 17, and 20 invalid because the claim term "overlay activation criterion" was not literally described in the Specification and is otherwise indefinite.

A second error is the same court found claims 9 and 20 further invalid as inconsistent with parent claims 1 and 13, respectively, because claims 1 and 13 required information be provided via Internet, while dependent claims required the same information may be provided locally without the Internet.

A third error is claims 1, 3, 5, 13, and 15 have apparent antecedent basis defects and may be invalid.

A fourth error is claim 1 includes the term "TV timer box" which is not literally described in the Specification and may be invalid.

A fifth error is claims 1, 13, and 17 include the term "combiner circuit" which is not literally described in the Specification and may be invalid.

A sixth error is claims 13-21 include the term "TV-Internet Integration circuit" which is not literally described in the Specification and may be invalid.

5

PTO/AIA/06 (09-20)
Approved for use through 03/31/2023. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REISSUE APPLICATION DECLARATION BY THE ASSIGNEE	Docket Number (optional) 103692.0001US4re

I hereby declare that:

The residence and mailing address of the inventor or joint inventors are stated below.

Name of the Assignee:

TVnGo Ltd. (BVI)

I am authorized to act on behalf of the assignee (if the assignee is a juristic entity).

The entire title to the patent identified below is vested in said assignee, or if there are multiple assignees/owners, all assignees/owners have executed a Reissue Application Declaration to account for the entire title of the patent identified below.

Inventor Yakkov Merlin

Residence: City	State	Country
Raanana	-	Israel

Mailing Address

9 Haeshel St

City	State	Zip	Country
Raanana	-	43585	Israel

☐ Additional Inventors are named on separately numbered sheets attached hereto.

Patent Number US 9,407,969	Patent Issue Date August 2, 2016

I believe said inventor(s) to be the original inventor or original joint inventors of the subject matter which is described and claimed in said patent, for which a reissue patent is sought on the invention titled:

Forming Overlays At User's Premises And Utilizing Them For Selective Combinations Of Tv Broadcast Channel Format Material And Ip-Format Material

the specification of which

☑ is attached hereto.

☐ was filed on _____ as reissue application number _____.

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

I believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below.
(Check all boxes that apply.)

☐ by reason of a defective specification or drawing.

☐ by reason of the patentee claiming more or less than he had the right to claim in the patent.

☑ by reason of other errors.

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-0031. Public burden for this form is estimated to average 12 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/AIA/06 (09-20)
Approved for use through 03/31/2023. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REISSUE APPLICATION DECLARATION BY THE ASSIGNEE	Docket Number (Optional) 103692.0001US4re

At least one error upon which reissue is based is described below. If the reissue is a broadening reissue, a claim that the application seeks to broaden must be identified and the box below must be checked:

See attached.

[Attach additional sheets, if needed.]

☐ **The application for the original patent was filed under 37 CFR 1.46 by the assignee of the entire interest.**

I hereby appoint:

☑ Practitioners associated with Customer Number: 24392

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Correspondence Address: Direct all communications about the application to:

☑ The address associated with Customer Number: 24392

OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

Signature	Date (Optional) 07/07/2022
Legal name of person signing	Eliot Harary
Address of Assignee	912 1st Court, Brooklyn, NY 11223

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/AIA/53 (09-12)
Approved for use through 01/31/2020. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REISSUE APPLICATION: CONSENT OF ASSIGNEE; STATEMENT OF NON-ASSIGNMENT

Docket Number (Optional)
103692.0001US4re

This is part of the application for a reissue patent based on the original patent identified below.

Name of Patentee(s)
TVnGo Ltd.

Patent Number	Date Patent Issued
US 9,407,969	August 2, 2016

Title of Invention
Forming Overlays At User's Premises And Utilizing Them For Selective Combinations Of TV Broadcast Channel Format Mater

1. [X] Filed herein is a statement under 37 CFR 3.73(c). (Form PTO/AIA/96)

2. [ ] Ownership of the patent is in the inventor(s), and no assignment of the patent is in effect.

One of boxes 1 or 2 above must be checked. If multiple assignees, complete this form for each assignee. If box 2 is checked, skip the next entry and go directly to "Name of Assignee."

The written consent of all assignees and inventors owning an undivided interest in the original patent is included in this application for reissue.

The assignee(s) owning an undivided interest in said original patent is/are TVnGo Ltd., and the assignee(s) consents to the accompanying application for reissue.

Name of assignee/inventor (if not assigned)
TVnGo Ltd.

Signature	Date
	07/07/2022

Typed or printed name and title of person signing for assignee (if assigned)

Eliot Harary; CEO/Chairman

This collection of information is required by 37 CFR 1.172. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: TVNGO LTD. (BVI)

Application No./Patent No.: 9407969 Filed/Issue Date: August 2, 2016

Titled: Forming Overlays At User's Premises And Utilizing Them For Selective Combinations Of Tv Broadcast Channel Format Material And Ip-Format Material

TVNGO LTD. (BVI), a limited company

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

   ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

   ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☑ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 035417, Frame 0667, or for which a copy thereof is attached.

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

   1. From: _____ To: _____

      The document was recorded in the United States Patent and Trademark Office at

      Reel _____, Frame _____, or for which a copy thereof is attached.

   2. From: _____ To: _____

      The document was recorded in the United States Patent and Trademark Office at

      Reel _____, Frame _____, or for which a copy thereof is attached.

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Robert D. Fish/	July 18, 2022
Signature	Date
Robert D. Fish	33880
Printed or Typed Name	Title or Registration Number

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL
First Named Inventor/Applicant Name:	Yaakov MERLIN
Filer:	Robert Fish/Tammy Lightman
Attorney Docket Number:	103692.0001US4re

Filed as Small Entity

Filing Fees for Reissue (Utility)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
UTILITY REISSUE BASIC	2014	1	160	160
REISSUE OR REISSUE DESIGN CPA SEARCH FEE	2114	1	350	350
REISSUE OR REISSUE DESIGN CPA EXAM. FEE	2314	1	1160	1160
Pages:				
Claims:				
REISSUE CLAIMS IN EXCESS OF 20 FOR SMALL	2205	1	50	50
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**1720**

Electronic Acknowledgement Receipt

EFS ID:	46217310
Application Number:	17867612
International Application Number:	
Confirmation Number:	8539
Title of Invention:	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL
First Named Inventor/Applicant Name:	Yaakov MERLIN
Customer Number:	24392
Filer:	Robert Fish/Tammy Lightman
Filer Authorized By:	Robert Fish
Attorney Docket Number:	103692.0001US4re
Receipt Date:	18-JUL-2022
Filing Date:	
Time Stamp:	21:00:05
Application Type:	Reissue (Utility)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$1720
RAM confirmation Number	E20227HL00382388
Deposit Account	500341
Authorized User	Tammy Lightman

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Reissue Application	1-aia0050-Reissue-Appl-Transmittal.pdf	330892 b0ccb53cbb540080b9e572b2fa298cd213ffc94d	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	2-Reissue-fee-transmittal.pdf	271320 30af136d70d2a8cf3a2bb76a928aad06c3c18919	no	2
Warnings:					
Information:					
3	Application Data Sheet	3-ADS-aia0014-1US4re.pdf	1256465 a208f63c621c5846f43fa3f80b843d2ffb8a54ad	no	8
Warnings:					
Information:					
4	Specification	4-US9407969.pdf	833973 d72e876fffdbb2bd74d2d23425bcb050643f40aa	no	15
Warnings:					
Information:					
5		5-PreliminaryAmendment-01b_TVnGo1US4re.pdf	60145 cdf32925164f468ffc3dfbfa30871683bd995c3a	yes	12

Multipart Description/PDF files in .zip description

Document Description	Start	End
Preliminary Amendment	1	1
Claims	2	6
Specification	7	9

	Applicant Arguments/Remarks Made in an Amendment		10	12	
Warnings:					
Information:					
6	Reissue Oath or Declaration	6-Declaration-by-Assignee-AIA0006-with-Attachment.pdf	477269 939e8c468e83111aa31383715045cbf2380005e8	no	4
Warnings:					
Information:					
7	Consent of Assignee accompanying the declaration	7-Consent-by-Assignee-AIA0053.pdf	265160 e95805da2539b04fbed58086ed6ce0e1b0913c7f	no	2
Warnings:					
Information:					
8	Assignee showing of ownership per 37 CFR 3.73	8-aia0096-Ownership-Statement.pdf	118369 dc2aef58c742c5ee3508a9f79c0cc9a46dd49403	no	3
Warnings:					
Information:					
9	Fee Worksheet (SB06)	fee-info.pdf	46550 2071b458ceae0ac4123e7c72357d74e4aeb028e0	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	3660143		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

US009407969B2

(12) **United States Patent**
Merlin

(10) **Patent No.: US 9,407,969 B2**
(45) **Date of Patent: Aug. 2, 2016**

(54) **FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

(75) Inventor: **Yaakov Merlin**, Raanana (IL)

(73) Assignee: **TVGOLTD**, Amsterdam (NL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1137 days.

(21) Appl. No.: **13/336,189**

(22) Filed: **Dec. 23, 2011**

(65) **Prior Publication Data**

US 2012/0096505 A1 Apr. 19, 2012

Related U.S. Application Data

(63) Continuation of application No. 11/794,825, filed as application No. PCT/IL2005/000035 on Jan. 11, 2005, now Pat. No. 8,132,220.

(51) **Int. Cl.**

H04N 21/443	(2011.01)
H04N 21/643	(2011.01)
H04N 21/431	(2011.01)
H04N 21/438	(2011.01)
H04N 21/462	(2011.01)
H04N 21/4782	(2011.01)

(52) **U.S. Cl.**

CPC ***H04N 21/64322*** (2013.01); ***H04N 21/4316*** (2013.01); ***H04N 21/4381*** (2013.01); ***H04N 21/4438*** (2013.01); ***H04N 21/4622*** (2013.01); ***H04N 21/4782*** (2013.01)

(58) **Field of Classification Search**

None

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,136,898	A	10/2000	Loza et al.	
6,240,555	B1	5/2001	Shoff et al.	
6,351,270	B1	2/2002	Nishikawa et al.	
6,606,746	B1	8/2003	Zdepski et al.	
7,124,430	B2 *	10/2006	Aratani et al.	725/142
7,340,457	B1 *	3/2008	Killian et al.	
7,456,902	B2	11/2008	Kikinis	
2002/0007493	A1 *	1/2002	Butler et al.	725/109
2004/0107437	A1 *	6/2004	Reichardt et al.	725/37

FOREIGN PATENT DOCUMENTS

WO	WO 00/08855	2/2000
WO	WO 02/19689 A	3/2002

* cited by examiner

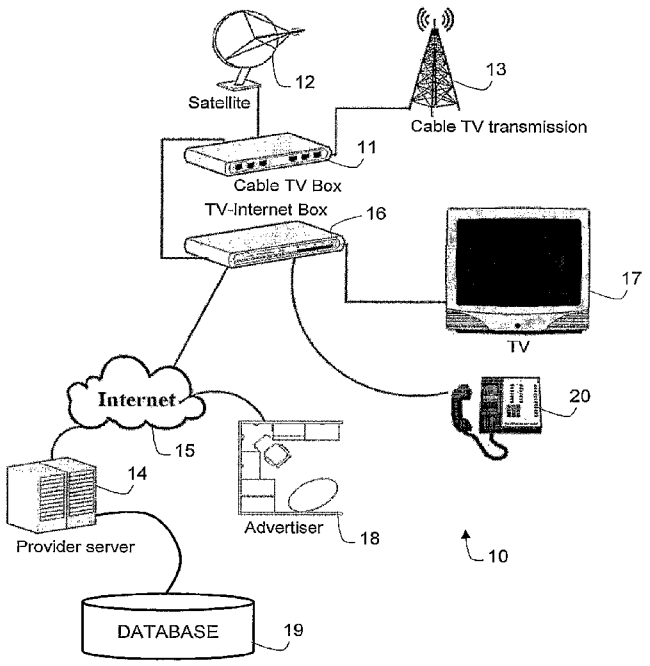
Primary Examiner — Mark D Featherstone

(74) *Attorney, Agent, or Firm* — Ivan S. Kavrukov; Cooper & Dunham

(57) **ABSTRACT**

A method of displaying an Internet signal on a TV. Preferably, at least a portion of the Internet signal is selectively displayed by a remote activation control signal.

21 Claims, 7 Drawing Sheets



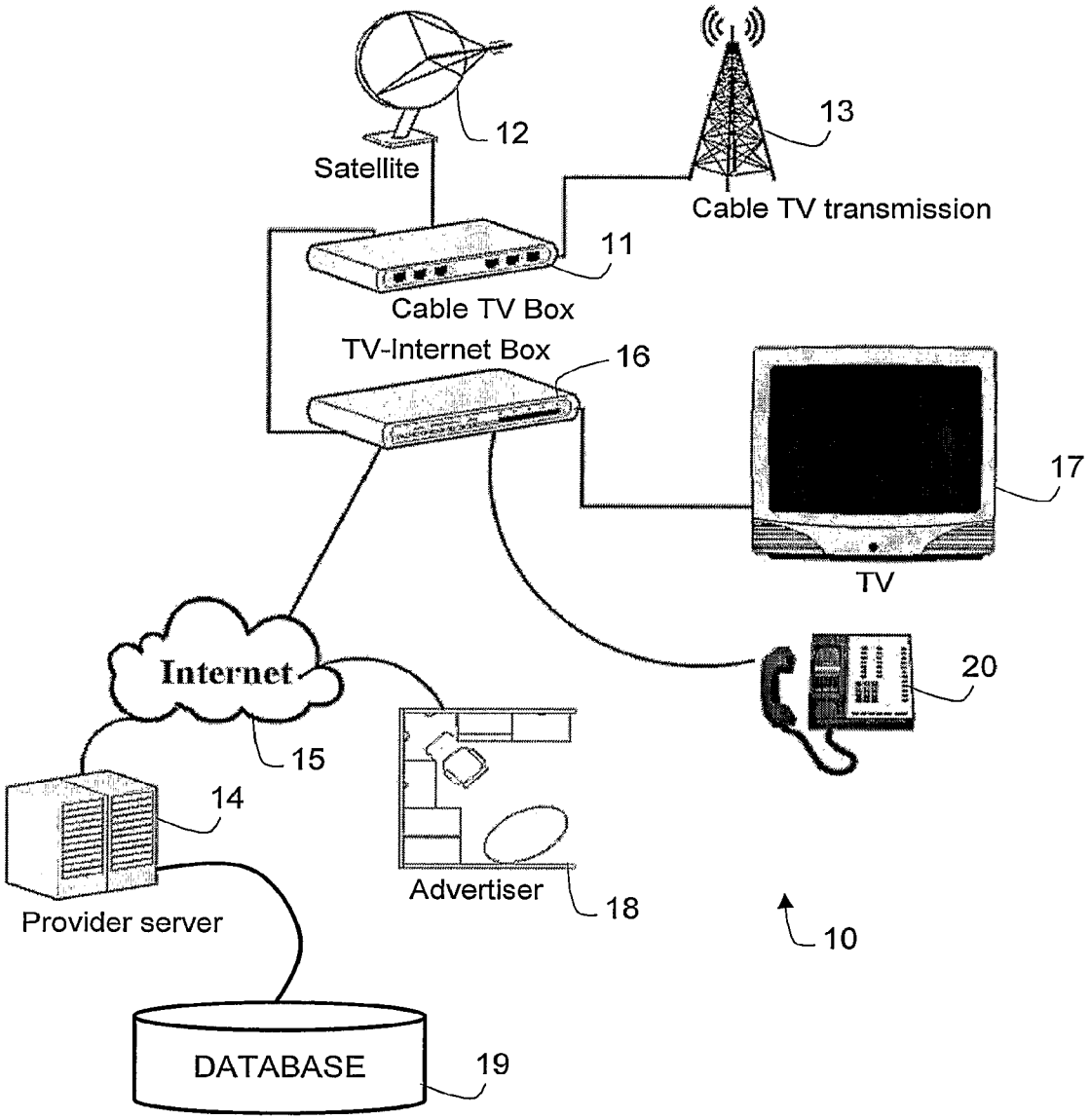

12
Satellite
13
Cable TV transmission
11
Cable TV Box
TV-Internet Box
16
17
TV
Internet
15
20
14
Provider server
Advertiser
18
10
DATABASE
19

FIG. 1

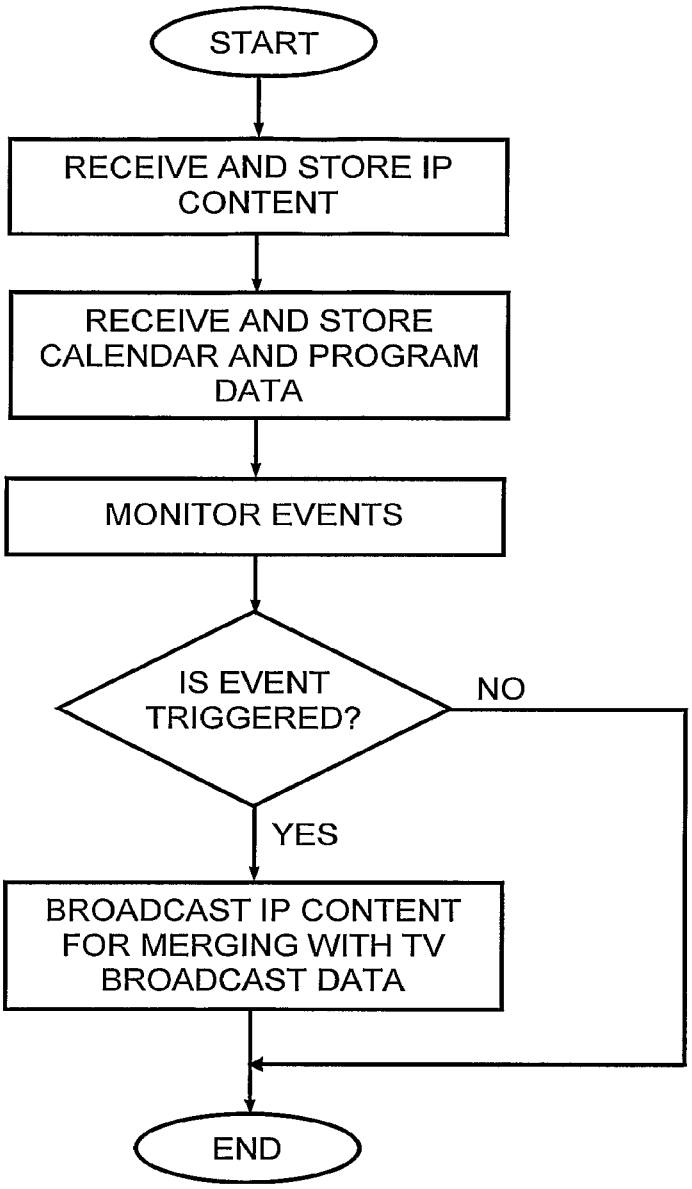

START
RECEIVE AND STORE IP CONTENT
RECEIVE AND STORE CALENDAR AND PROGRAM DATA
MONITOR EVENTS
IS EVENT TRIGGERED?
NO
YES
BROADCAST IP CONTENT FOR MERGING WITH TV BROADCAST DATA
END

FIG. 2

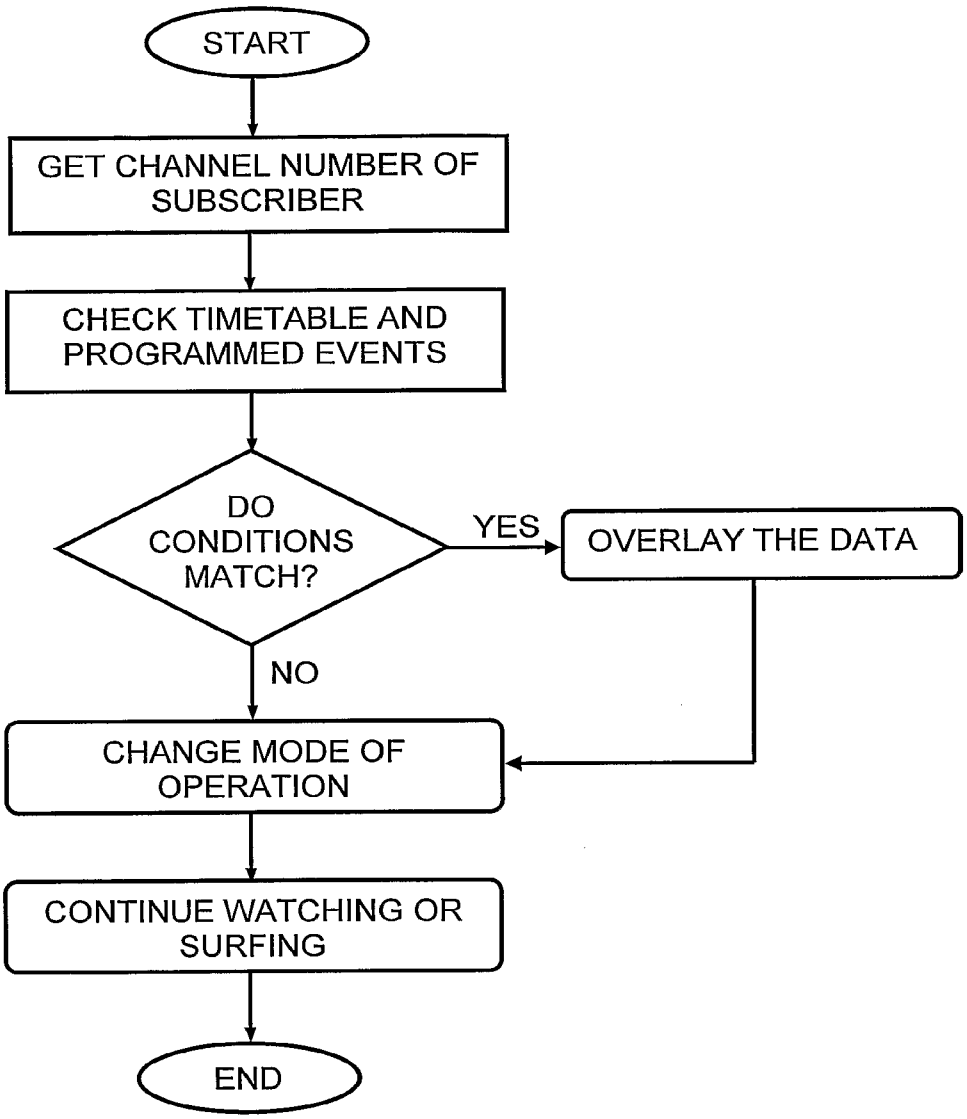

START
GET CHANNEL NUMBER OF SUBSCRIBER
CHECK TIMETABLE AND PROGRAMMED EVENTS
DO CONDITIONS MATCH?
YES
OVERLAY THE DATA
NO
CHANGE MODE OF OPERATION
CONTINUE WATCHING OR SURFING
END

FIG. 3

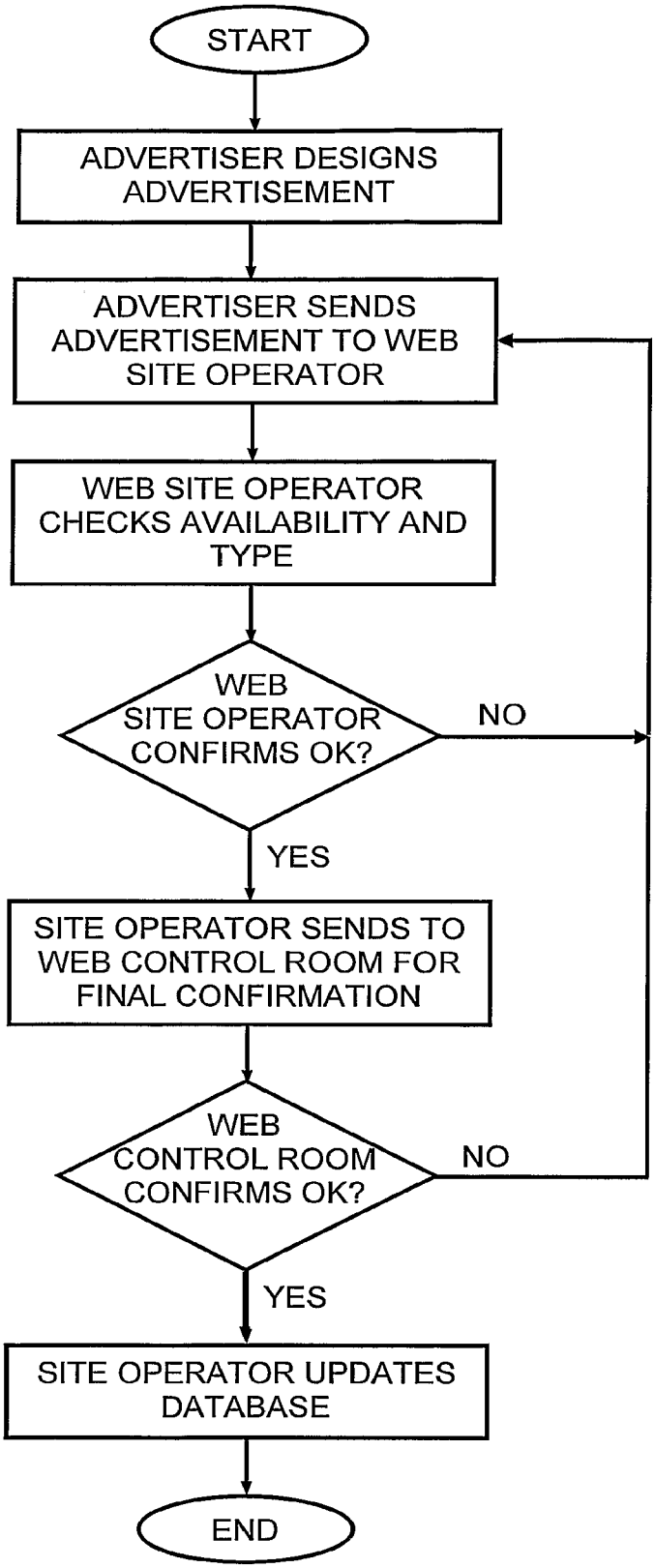

START
ADVERTISER DESIGNS ADVERTISEMENT
ADVERTISER SENDS ADVERTISEMENT TO WEB SITE OPERATOR
WEB SITE OPERATOR CHECKS AVAILABILITY AND TYPE
WEB SITE OPERATOR CONFIRMS OK?
NO
YES
SITE OPERATOR SENDS TO WEB CONTROL ROOM FOR FINAL CONFIRMATION
WEB CONTROL ROOM CONFIRMS OK?
NO
YES
SITE OPERATOR UPDATES DATABASE
END

FIG. 4

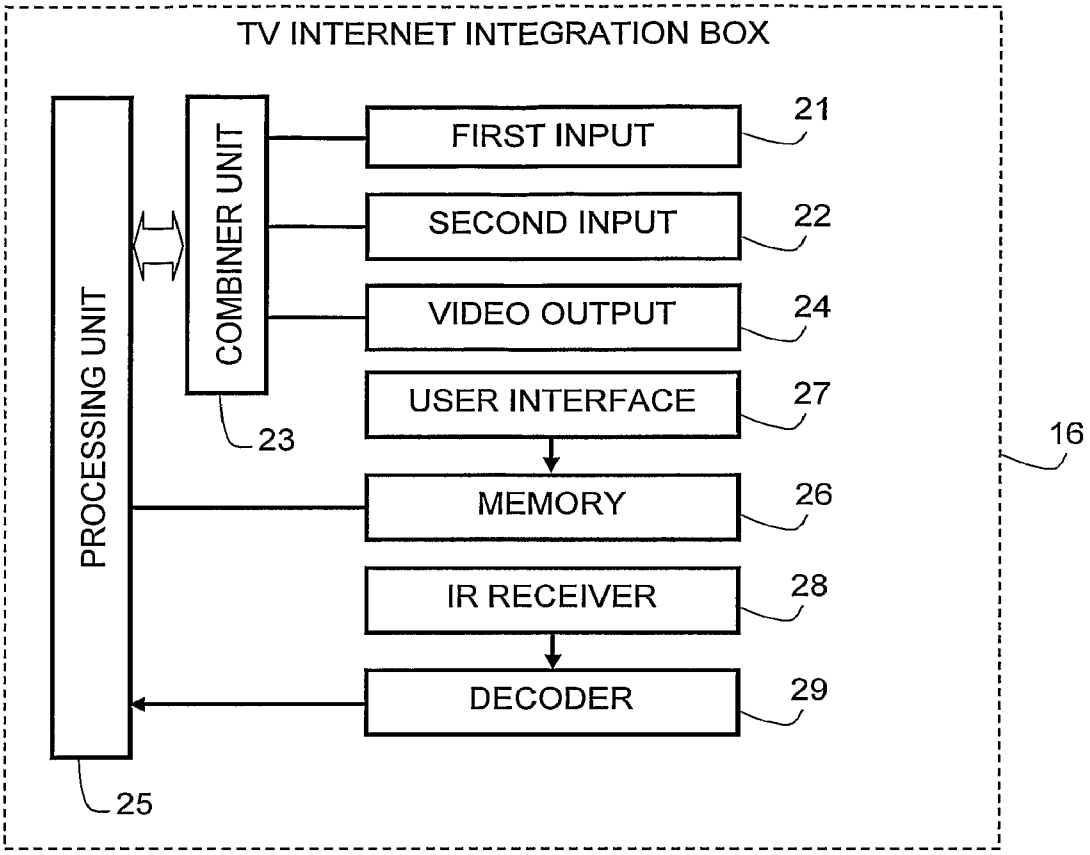

TV INTERNET INTEGRATION BOX
PROCESSING UNIT
COMBINER UNIT
23
FIRST INPUT
21
SECOND INPUT
22
VIDEO OUTPUT
24
USER INTERFACE
27
MEMORY
26
IR RECEIVER
28
DECODER
29
25
16

FIG. 5

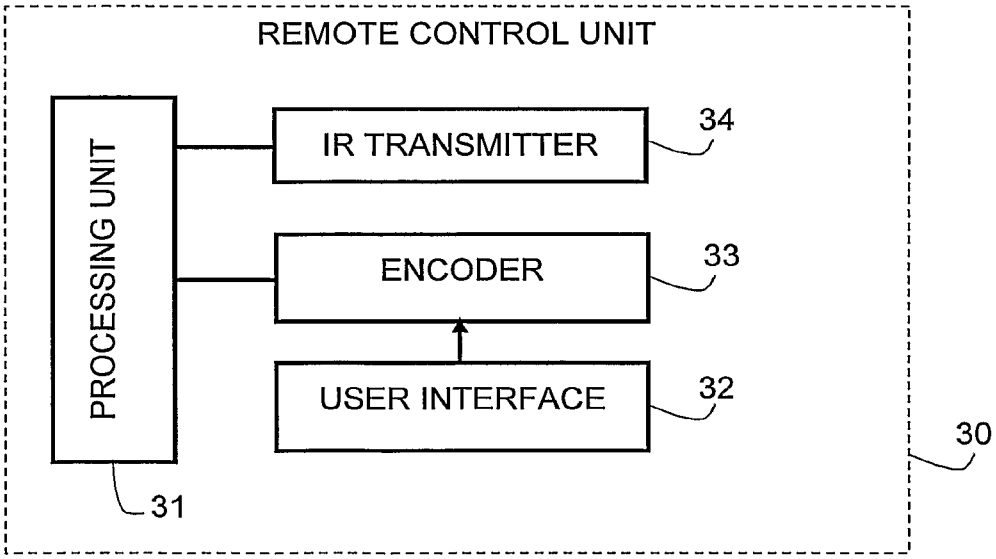

REMOTE CONTROL UNIT
PROCESSING UNIT
IR TRANSMITTER
34
ENCODER
33
USER INTERFACE
32
31
30

FIG. 6

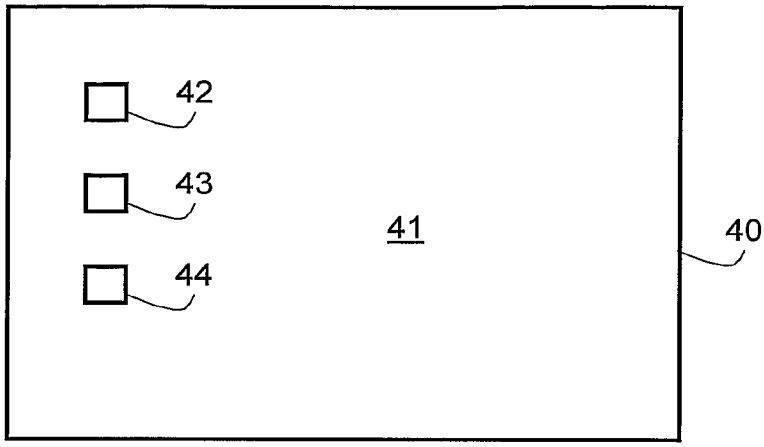


FIG. 7a

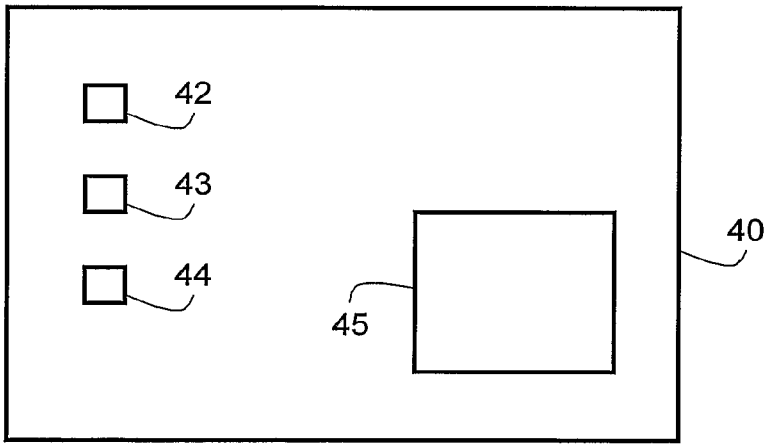


FIG. 7b

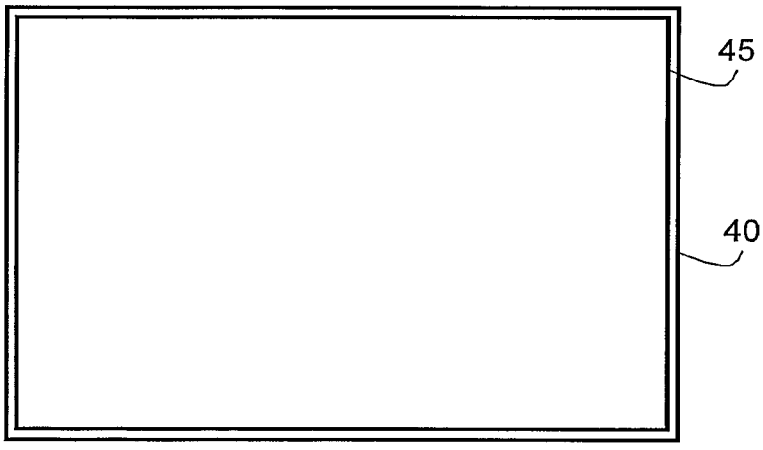


FIG. 7c

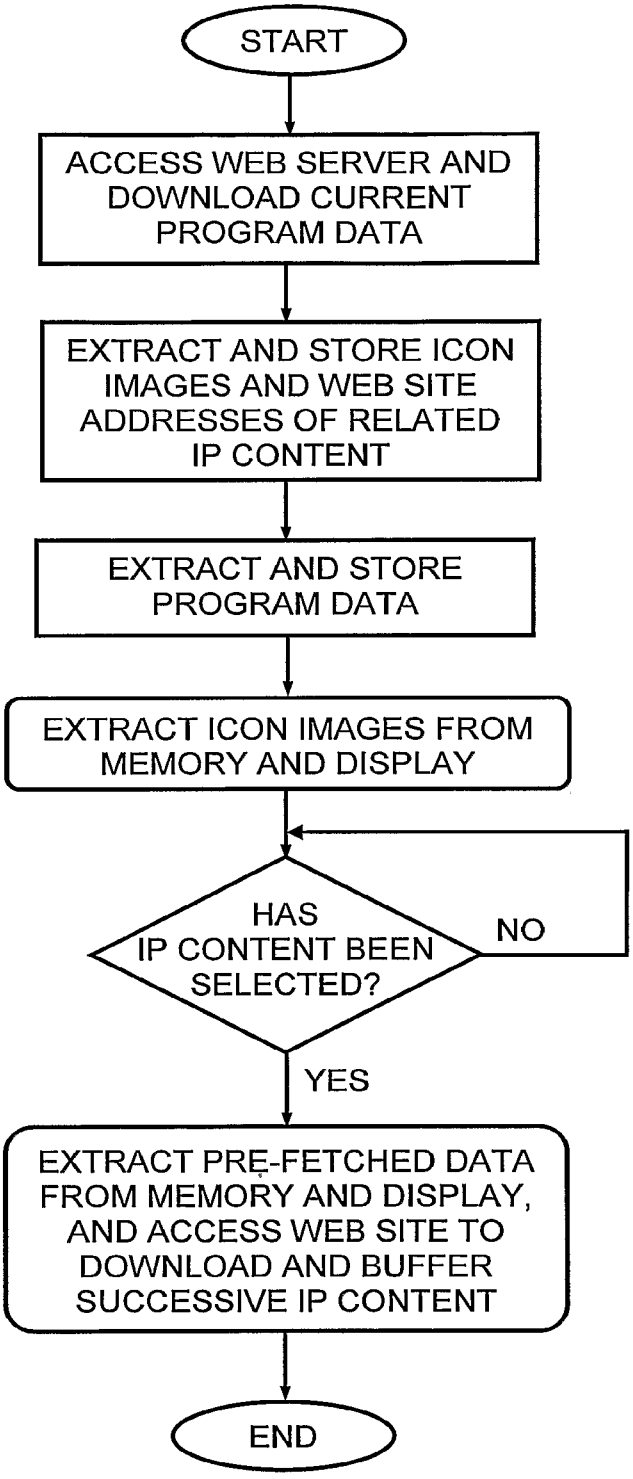

START
ACCESS WEB SERVER AND DOWNLOAD CURRENT PROGRAM DATA
EXTRACT AND STORE ICON IMAGES AND WEB SITE ADDRESSES OF RELATED IP CONTENT
EXTRACT AND STORE PROGRAM DATA
EXTRACT ICON IMAGES FROM MEMORY AND DISPLAY
HAS IP CONTENT BEEN SELECTED?
NO
YES
EXTRACT PRE-FETCHED DATA FROM MEMORY AND DISPLAY, AND ACCESS WEB SITE TO DOWNLOAD AND BUFFER SUCCESSIVE IP CONTENT
END

FIG. 8

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

This is a Continuation Application filed under 35 U.S.C. §120 as a continuation of U.S. patent application Ser. No. 11/794,825, filed on Jul. 6, 2007, which was a National Phase under 35 U.S.C. §371 of International Application No. PCT/IL2005/000035, filed on Jan. 11, 2005, the content of each of which is hereby incorporated by reference in their entirety.

FIELD OF THE INVENTION

This invention relates to the broadcast of audio/video content over the TV infrastructure and Internet.

BACKGROUND OF THE INVENTION

With the proliferation of cable TV and the high bandwidth currently available for the Internet, which promises to increase even more in the near future, Internet TV is fast becoming a viable alternative to regular and cable TV broadcast channels. Moreover, Internet TV is not subject to the government licensing laws required by cable and broadcast TV channels and thus offers programs that may not be obtainable using regular and cable TV broadcast channels.

It is not uncommon for Internet broadcasters to offer near DVD-quality movies that can be viewed either using video streaming or downloaded to the hard disk of a subscriber's computer for viewing "off-line". The video quality of such movies is vastly superior to that obtainable on a regular TV set, owing to the high resolution associated with computer displays that cannot presently be matched by TV screens. However, this is not particularly troublesome where only pictures are displayed; but it becomes a problem when textual information is displayed that is formatted for high resolution computer monitors since the text is then barely legible when displayed on lower resolution TV screens. Thus, if a regular TV set is used to display Internet content that is rich in text, the resulting display quality is poor.

It would therefore be a significant benefit to users of low resolution displays such as TV screens, to be able to watch regular and cable TV broadcasts and to integrate with Internet content on demand. In particular, it would be desirable to provide such a user with a visual and legible indication when viewing a regular or TV broadcast of available Internet movies or other programs and allow him to use the displayed indication to integrate with a desired Internet broadcast.

These requirements have been only partially addressed in the art. WO 00/08855 to United Video Properties, Inc. and entitled "A system and method for synchronizing television-related product content and internet-delivered information" describes a screen generator that merges program guide data with a TV image and superimposes an Interactive TV Guide on the regular TV image.

US 2002/0093594 (Kikinis) entitled "Method and system for identifying addressing data within a television presentation" illustrates in FIG. **5** the common connection of TV and Internet to a set-top box.

U.S. Pat. No. 6,606,746 to OpenTV, Inc. entitled "Interactive television system and method for displaying a graphical user interface using insert pictures" discloses interactive television having a compressed background picture and one or more compressed insert pictures commonly connected to a TV-Internet Integration box. The compressed insert pictures represent items of a GUI. The local system i.e. computer "pastes" the insert pictures into the background image.

U.S. Pat. No. 6,130,898 to Bell Atlantic Network Services, Inc., entitled "Simulcasting digital video programs for broadcast and interactive services" teaches an interactive TV system where TV broadcast data is merged with Internet data. To this end, public wireless packet data network is combined with a broadband digital broadcast network at a plurality of transmitter sites. Customer premises receiving systems include a receiving antenna and one or more digital entertainment terminals. The terminal includes a channel selector and digital receiver for capturing a digital transport stream from a selected channel. A processor converts selected program information from the transport stream for presentation, e.g. via a television set. The terminal also includes a CPU controlling the operation of the channel selector and the processor in response to user inputs.

None of these references appears to disclose the ability to merge broadcast TV signals with IP packet data at a customer site, specifically in such a manner that a conventional TV set is able to display Internet program selection data while viewing a TV broadcast program and to use the selected data to select an Internet channel, such as a movie, for display on the TV set instead of the TV broadcast program.

SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site.

It is a further object that such a TV-Internet Integration Box permits a TV set connected thereto to display Internet program selection data while viewing a TV broadcast program and to use the selected data to select an Internet movie for display instead of the TV broadcast program.

These objectives are realized in accordance with a first aspect of the invention by a method for facilitating first data broadcast over a TV subscriber channel to be displayed simultaneously together with second data broadcast over a digital data communications network, the method comprising:

receiving said first data and said second data;

combining said first data and said second data to form a combined video signal; and

conveying said combined video signal to a TV set in a user premises for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data, said second image being configured to allow a user at said user premises to interact therewith for redirecting to the digital data communications network and displaying a program broadcast thereby in at least a portion of the TV set.

In accordance with a second aspect of the invention there is provided a method for facilitating first data broadcast over a TV subscriber channel to be displayed simultaneously together with second data broadcast over a digital data communications network, the method comprising:

receiving said first data at a user premises;

receiving said second data at the user premises according to a user-profile associated with the second data;

combining said first data and said second data to form a combined video signal; and

conveying said combined video signal to a TV set in a user premises for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data, said second image being configured to allow a user at said user premises to interact there-

with for redirecting to the digital data communications network and displaying a program broadcast thereby in at least a portion of the TV set.

BRIEF DESCRIPTION OF THE DRAWINGS

In order to understand the invention and to see how it may be carried out in practice, a preferred embodiment will now be described, by way of non-limiting example only, with reference to the accompanying drawings, in which:

FIG. **1** is pictorial representation showing a TV-Internet Integration Box according to the invention connected to a mixed broadcast network for combining Internet and broadcast TV signals;

FIG. **2** is a flow diagram showing the principal actions carried out by the web server shown in FIG. **1**;

FIG. **3** is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box shown in FIG. **1**;

FIG. **4** is a flow diagram showing the principal actions carried out by an IP content provider such as an advertiser for creating IP content for overlaying by the TV-Internet Integration Box with a broadcast TV signal;

FIG. **5** is a block diagram showing the functionality of the TV-Internet Integration Box shown in FIG. **1**;

FIG. **6** is a block diagram showing the functionality of a remote control unit for interfacing with the TV-Internet Integration Box shown in FIG. **5**;

FIGS. **7***a*, **7***b* and **7***c* are pictorial representations showing a TV set during different stages of receiving and displaying combined Internet and broadcast TV signals; and

FIG. **8** is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box when prefetching a digital broadcast signal.

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

FIG. **1** is pictorial representation showing a mixed broadcast network **10** having a Cable TV Box **11** coupled to a satellite **12** and a Cable TV transmitter **13** for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server **14** via the Internet **15** (constituting a digital data communications network) to a TV-Internet Integration Box **16** for display on a TV set **17** coupled thereto. The TV set **17** may be constituted by a computer having a video card and a high resolution display monitor. However, the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box **16** is connected to the Cable TV Box **11** for combining the broadcast TV signals received by the Cable TV Box **11** with the IP packet data broadcast via the Internet **15**. Also shown is an advertiser **18** having a computer coupled to the Internet **15** for downloading advertising content to the web server **14** for storage in a database **19** and a telephone **20** coupled to the TV-Internet Integration Box **16** for feeding telephony signals to the TV-Internet Integration Box **16**, which combines the received telephony signals with video data received from the Cable TV Box **11** and/or the Internet **15**.

The advertiser **18** typically pays for specific time slots and for one or more specific channels during which his advertisement will be broadcast. Thus, in addition to the advertising content which is prepared and then stored on the web server **14** in known manner, the advertiser **18** also specifies when the advertisement is to be broadcast and on which TV channel or channels. By such means, a sports advertiser can request time during the interval of a football match to broadcast a commercial, while a toy advertiser would obviously prefer to broadcast a commercial during a children's TV program. Different time slots may be charged out at different rates depending on the ratings associated with the associated TV program. After selecting one or more time slots, the advertisement content as well as the selected time slots and program data are stored in the database **19** accessed by the web server **14**.

FIG. **2** is a flow diagram showing the principal actions carried out by the web server **14**, which is responsive to an event timetable stored and updated in the database **19**. To this end, an IP content provider interfaces with the web server for creating IP content and associating therewith calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises. Once this is done, the web server **14** monitors events, which are triggered in known manner causing the web server **14** to extract from the database **19** pre-stored IP content for streaming over the Internet **15** to the TV-Internet Integration Box **16**, where it is processed as described below with reference to FIG. **3** of the drawings.

FIG. **3** is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box **16**. In accordance with one embodiment of the invention, the subscriber selects what kind of IP content he wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed together with the TV broadcast data. For example, a subscriber may wish to block certain types of program material or may wish to receives details thereof only during limited hours, for example when the children are asleep. To this end, the subscriber is able to program the TV-Internet Integration Box **16** in much the same way that a video cassette recorder is programmed so as to store in the memory **25** a timetable indicating what type of IP data is to be displayed and when. The timetable is updated as and when required by the subscriber. The TV-Internet Integration Box **16** is adapted to check the timetable periodically and to filter out incoming IP content that is either of a type that is not required or that is broadcast during an unauthorized time window. By such means, an additional layer of authorization may be provided to that stored in the database **19** for access by the web server **14**, thus allowing pre-fetching of IP content and storage in the memory **25** of the TV-Internet Integration Box **16**. Upon detecting a matching event, corresponding to received IP content that is of interest to the subscriber, the TV-Internet Integration Box **16** overlays the matched IP content with the current broadcast and displays the new integrated video on the subscriber's TV set **17**. For example, the matched information may be an icon that indicates to the subscriber that an Internet movie is currently being broadcast; or it may be an advertisement or information related to the TV program being broadcast.

The subscriber can respond to the overlaid data using a remote control unit, described below with reference to FIG. **6** of the drawings, which is programmed to interact with the displayed icon or other data that is overlaid on the TV broadcast. To this end, the displayed IP content may optionally contain textual information advising the subscriber to press a particular button on the remote control unit. Alternatively, buttons on the remote control unit may be color-coded and the icon may be colored so as to indicate to the subscriber which color-coded button to press for selection of the corresponding

IP content. If the subscriber responds to the overlaid data by pressing a button on the remote control unit, the TV-Internet Integration Box **16** receives the signal from the remote control unit and changes the priorities for use with the Picture-in-Picture (PIP) technique to display the TV broadcast in a reduced window and to show the other media, i.e. the IP content, in an enlarged window. The IP content can be a custom designed web page for TV, or a game or advertisement movie or any other information placed on the matched record. PIP techniques are known per se and allow a video or graphics image to be inserted on top of a movie clip and to be positioned and sized. An Effect In and Effect Out may be used to fade or move the inserted video to the screen. In accordance with one such technique, the bulk of the IP content e.g. corresponding to a movie may be rendered transparent so as to provide a transparent window through which an icon e.g. relating to the movie is visible. The video content of the TV broadcast is displayed in one window and the IP content in another window. Since the bulk of the IP content is transparent it will remain invisible to the subscriber, while the icon (or text) will be visible since it is opaque. On selecting the displayed icon, the attributes may simply be reversed so as to hide the icon while displaying the movie or other content. At the same time, the TV broadcast may be re-sized either to display it in a minimized window it the case that it is to be suppressed altogether, or to display it superimposed on the IP content so that both are visible at the same time in different, possibly overlapping, windows.

FIG. **4** is a flow diagram showing the principal actions carried out by an IP content provider such as an advertiser for creating IP content for overlaying by the TV-Internet Integration Box with a broadcast TV signal. Thus, the advertiser designs an advertisement and sends it together with a request to a web site link via the Internet or off-line as required. Since the IP content is intended for display on a low resolution TV screen, any textual information that forms part of the IP content is formatted so as to be legible when displayed on lower resolution TV screens. Generally, this requires reducing the quantity of textual information to a minimum and sizing any text so that it is legible. Often, a web advertiser will wish to create an on-line advertisement based on an existing web page. In such case, it may be necessary to reduce and resize any textual information so as to comply with these requirements.

The request specifies calendar and program data as explained above, which the web site operator checks for availability and type, defining to which group of users it belongs. If the required time slots are available for the requested channels, the site operator confirms the request and forwards the request to the web control room for final confirmation. On confirming the request, a status flag of the advertisement is changed so as to indicate that the advertisement is awaiting final confirmation from the web control room. At the web control room the advertisement is checked for content by human evaluators who either approve or reject the advertisement content and, in the case of rejection, may provide reasons therefore. If the advertisement (or other IP content) is approved by the web control center, its status is set to "approved" and the web control center bills the customer and the web site operator adds the advertisement and the scheduling information to the database **19**. The customer who is billed is typically the advertiser but may be any entity that is identified by a digital signature associated with the advertisement. If either of the requests for approval is rejected the status of the advertisement is set to "rejected" and the web control room informs the advertiser of the grounds for rejection, allowing the advertiser to change the request and re-send to the web site operator. Optionally, in such case the web server may be adapted to display to the advertiser the occupied timetable and suggest new timetable. Only those advertisements whose status flag indicates that they are approved by the web control room are actually available for transmission. The time slot and channel information associated with any advertisement that is not so approved remain available for other advertisements and will be shown as available to another advertiser who attempts to schedule an advertisement. Only when the advertisement is actually approved by the web site operator and its status is updated accordingly, are the transmission time and channel locked for use by other users.

The IP packet data may optionally be associated with predefined user-profiles that are also stored in the database **19** so that the advertisement or other IP data is sent only to specific TV-Internet Integration Boxes. Such user-profiles may be configured by the advertiser or by the user. Thus, for example, the invention allows supplementary or complementary program content to be associated with a TV broadcast, while providing the facility to view the supplementary program content only to specific subscribers, according to their user-profiles.

Thus, by way of non-limiting example, the invention allows sign language to be associated with a TV broadcast for the hard of hearing. It is known to display sign language in a corner of the screen, but since this is usually done indiscriminately it also apt to disturb the majority of viewers who do not need the sign language. The invention may be used to avoid this by conveying the sign language as IP content separate from main TV broadcast and allowing subscribers to register for a "sign language" service so that only registered subscribers receive the IP content. IP content files corresponding to sign language to be associated with different TV broadcasts are created as explained above, and stored in the database **19** together with user-profile data indicating which subscribers are registered to obtain the service. The user-profile data may contain data that further refines the target audience, such as categories of TV program alongside which the sign language is to be displayed. The user-profile data may further contain geographical data or language data that allows sign language corresponding to a target language to be conveyed to specific audiences. By such means, a TV program can be accompanied by a sign language overlay that is customized to a target language depending on the location of the IP target address or the language requested by the subscriber on registering for the service.

FIG. **5** is a block diagram showing the functionality of the TV-Internet Integration Box **16** shown in FIG. **1**. Thus, the TV-Internet Integration Box **16** comprises a first input **21** for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input **22** for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with predefined user-profiles associated with IP packet data and stored in the database **19**. A combiner unit **23** is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output **24** is coupled to the combiner unit **23** for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

PTO/AIA/50 (10-17)
Approved for use through 03/31/2023. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REISSUE PATENT APPLICATION TRANSMITTAL

Address to:		
Mail Stop Reissue **Commissioner for Patents** **P.O. Box 1450** **Alexandria, VA 22313-1450**	Attorney Docket No.	103692.0001US4re
	First Named Inventor	Yaakov MERLIN
	Original Patent Number	9407969
	Original Patent Issue Date (Month/Day/Year)	08/02/2016
	Priority Mail Express® Label No.	

APPLICATION FOR REISSUE OF: (*Check applicable box*) ☑ Utility Patent ☐ Design Patent ☐ Plant Patent

APPLICATION ELEMENTS (37 CFR 1.173)

1. ☑ **Fee Transmittal Form** (PTO/SB/56)
2. ☑ **Applicant asserts small entity status.** See 37 CFR 1.27
3. ☐ **Applicant certifies micro entity status.** See 37 CFR 1.29. Applicant must attach form PTO/SB/15A or B or equivalent.
4. ☑ **Specification and Claims** in double column copy of patent format (*amended, if appropriate*)
5. ☑ **Drawing(s)** (*proposed amendments, if appropriate*)
6. ☑ **Reissue Oath/Declaration or Substitute Statement** (37 CFR 1.175) (PTO/AIA/05, 06, or 07)
7. ☑ **Application Data Sheet** **NOTE:** Benefit claims under 37 CFR 1.78 and foreign priority claims under 37 CFR 1.55 MUST be set forth in an Application Data Sheet (ADS).
8. ☑ **Original U.S. Patent currently assigned?** ☑ Yes ☐ No (*If Yes, check applicable box(es)*)
   - ☑ Written Consent of all Assignees (PTO/AIA/53)
   - ☑ 37 CFR 3.73(c) Statement (PTO/AIA/96)
9. ☐ **CD-ROM or CD-R** in duplicate, Computer Program (*Appendix*) or large table
   - ☐ Landscape Table on CD
10. **Nucleotide and/or Amino Acid Sequence Submission** (*if applicable, items a. – c. are required*)
    - a. ☐ Computer Readable Form (CRF)
    - b. ☐ Specification Sequence Listing on:
      - i. ☐ CD -ROM (2 copies) or CD-R (2 copies); **or**
      - ii. ☐ Paper
    - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

11. ☑ **Statement of status and support for all changes to the claims.** See 37 CFR 1.173(c).
12. ☐ **Power of Attorney**
13. ☐ **Information Disclosure Statement (IDS)** PTOSB/08 or PTO-1449
    - ☐ Copies of citations attached
14. ☐ **English translation of Reissue Oath/Declaration** (*if applicable*)
15. ☐ **Return Receipt Postcard** (MPEP § 503) (Should be specifically itemized)
16. ☑ **Preliminary Amendment** (37 CFR 1.173; MPEP § 1453)
17. ☑ **Other:** Notice of related litigation filed in notes accompanying Preliminary Amendment.

☐ This is a continuation reissue or divisional reissue application (*i.e.*, a second or subsequent reissue application for the same issued patent). (*Check box if applicable.*)

18. CORRESPONDENCE ADDRESS

☑ The address associated with Customer Number: 24392 **OR** ☐ Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone			
Email					

Signature	/Robert D. Fish/	Date	July 18, 2022
Name (Print/Type)	Robert D. Fish	Registration No.	33880

This collection of information is required by 37 CFR 1.173. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop Reissue, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/SB/56 (10-20)
Approved for use through 03/31/2023. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REISSUE APPLICATION FEE TRANSMITTAL FORM

Docket Number (Optional)
103692.0001US4re

Application as Filed – Part 1

	(1) Claims in Patent	(2) Claims Filed in Reissue Application	(3) Number Extra	Micro Entity Rate ($)	Micro Entity Fee ($)	Small Entity Rate ($)	Small Entity Fee ($)	Undiscounted Rate ($)	Undiscounted Fee ($)
Total Claims (37 CFR 1.16(i))	(A) 21	(B) 21	* 1 =	x =		x 50 =	50	x =	
Ind. Claims (37 CFR 1.16(h))	(C)	(D)	** =	x =		x =		x =	
Application Size Fee (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $420 ($210 for small entity, $105 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
		Filing Fee (37 CFR 1.16(e))					160		
		Search Fee (37 CFR 1.16(n))					350		
		Examination Fee (37 CFR 1.16(r))					1160		
		Total Filing Fee					1720		

Application as Amended – Part 2

	(1) Claims Remaining After Amendment	(2) Highest Number Previously Paid For	(3) Extra Claims Present	Micro Entity Rate ($)	Micro Entity Fee ($)	Small Entity Rate ($)	Small Entity Fee ($)	Undiscounted Rate ($)	Undiscounted Fee ($)
Total Claims (37 CFR 1.16(i))	*** -	****	=	x =		x =		x =	
Ind. Claims (37 CFR 1.16(h))	*** -	*****	=	x =		x =		x =	
Application Size Fee (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $420 ($210 for small entity, $105 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
			Total Additional Fee						

* Enter (B) – 20, or enter "0" if (B) is less than 20.
** Enter (D) – minus 3, or enter "0" if (D) is less than 3.
*** After any cancellation of claims.
**** If the "Highest Number of Total Claims Previously Paid For" is less than 20, enter "20" in this space.
***** If the "Highest Number of Independent Claims Previously Paid For" is less than 3, enter "3" in this space.

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☑ The Director is hereby authorized to charge any additional fees under 37 CFR 1.16 or 1.17 which may be required, or credit any overpayment to Deposit Account No. 500341.

☐ A check in the amount of $ _____ to cover the filing/additional fee is enclosed.

☑ Payment made via EFS-Web.

☐ Payment by credit card. Form PTO-2038 is attached. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

/Robert D. Fish/ — Signature
July 18, 2022 — Date
Robert D. Fish — Typed or Printed Name
33880 — Registration Number, if applicable
949-943-8300 — Telephone Number

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

The combiner unit **23** is shown coupled to a processing unit **25** although in practice it may be implemented in software by the processing unit **25**. A memory **26** is coupled to the processing unit **25** for storing program data, such as profiles and program timetables etc. so as to allow the processing unit **25** to filter incoming IP content according to pre-defined profiles and other selection data. The processing unit **25** is also coupled to a user interface **27** that allows the subscriber to program the TV-Internet Integration Box **16** and store the program data in the memory **26**. An IR receiver **28** is adapted to receive IR commands from a remote control unit described below with reference to FIG. **6** and is coupled to a decoder **29**, which decodes a received IR signal and feeds it to the processing unit **25** for further processing.

FIG. **6** is a block diagram showing the functionality of a remote control unit **30** for interfacing with the TV-Internet Integration Box **16** shown in FIG. **5**. The remote control unit **30** includes a processing unit **31** coupled to a user interface **32**, typically having a keypad or pushbuttons for program selection and setting as well as other functions. The user interface **32** is coupled to an encoder **33** which is responsive to a pressed key or key combination for producing a corresponding IR signal that is transmitted by an IR transmitter **34** to the TV-Internet Integration Box **16** for receipt by the IR receiver **28** thereof.

As noted above, the keys may be color coded in correspondence with pre-arranged colors of commonly displayed icons, so that pressing on a specific key activates the displayed icon of the same color. Alternatively, at least some of the keys may be covered with transfers depicting commonly displayed icons, whereupon the appropriate keys or button for activating each icon are easily recognized.

The keys may also be programmed so that depressing the same key more than once automatically re-sizes the windows containing the TV broadcast and the Internet broadcast. For example, FIG. **7***a* shows the default situation where a TV screen **40** displays a conventional TV broadcast in a window **41** that is sized to occupy the whole area of the TV screen **40** and will be referred to as the primary window. Also shown are IP icons **42**, **43** and **44** each of which points to a different IP content that is streamed from a respective web site of known address. On pressing the key on the remote control unit **30** that corresponds to the icon **42**, the IP content corresponding thereto is displayed within a small window **45** (referred to as the secondary window) that is contained within the primary window **41** as shown in FIG. **7***d*. The icons **42**, **43** and **44** remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit **30**. On pressing a key a second time in succession, the IP content is re-sized so that its window **45** occupies substantially the whole area of the screen as shown in FIG. **7***c*. On pressing the key a third time in succession, the situation reverts to the default shown in FIG. **7***a* where the primary window **41** containing the TV broadcast occupies the whole area of the TV screen **40**. Thus, each key operates as a three-way toggle that switches between three different display modes.

The second data containing display information for the icons also contains data that informs the TV-Internet Integration Box **16** on which channel or channels the associated IP content is to be streamed and at what times. The second data also specifies the web site where the IP content is located. This is summarized in the following table:

TABLE I

Second data - definition			
Icon image	Channel	Time	Website of IP content
ICON.GIF	2; 23	19:30; 21:30	www.AB.com/adverts/123.htm

Thus, the second data depicted in Table I above shows that the icon image is contained in a file called ICON.GIF and that the IP content relating thereto is to be streamed on channels 2 and 23 at times 19:30 and 21:30, these being the start times. The end times are determined by the duration of the IP content to be streamed, which is downloaded from a web site whose name is shown in the table and is contained in the second data.

The second data is downloaded from the web server **14** whose web site address is known to the TV-Internet Integration Box **16**. In accordance with one embodiment, the processing unit **25** is programmed to access the web server **14** periodically and download current program data. For example, once every 2 to 3 hours the TV-Internet Integration Box **16** may automatically access the web server **14** to download the second data corresponding current program data for the next 3 hours as formatted according to Table I. The downloaded information is stored locally in the memory **26** of the TV-Internet Integration Box **16**. This allows the TV-Internet Integration Box **16** to pre-fetch IP content relating to all the currently displayed icons and to store the data relating thereto in the memory **26** thus obviating the need to access the web site of a selected icon for the purpose of downloading IP selected content. Since this carries the overhead of web access and downloading of data, which can be cumbersome particularly if there is insufficient bandwidth, pre-fetching in this manner ensures that initial IP content data will be immediately available on selection of one of the icons.

FIG. **8** is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box when pre-fetching a digital broadcast signal. Thus, the TV-Internet Integration Box **16** periodically accesses the web server **14** and downloads current program data, constituting the second data. It then extracts from the current program data the image files of the current icons and stores them in the memory **26**. In like manner, it extracts the web sites of the IP content corresponding to the currently displayed icons and then accesses these sites to pre-fetch the respective IP content, which it likewise stores in the memory **26**. On selection of an icon, the TV-Internet Integration Box **16** opens a secondary window **45** within the primary window **41**, reads from the memory **26** the pre-fetched IP content and displays it in the secondary window **45**.

It will be understood that the TV-Internet Integration Box according to the invention may be at least partially implemented by a suitably programmed computer. Likewise, the invention contemplates a computer program being readable by a computer for executing the method of the invention. The invention further contemplates a machine-readable memory tangibly embodying a program of instructions executable by the machine for executing the method of the invention.

The invention claimed is:

1. A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising:

(a) providing a combiner circuit at the user's premises, wherein:

the combiner circuit is coupled to a TV set and connected to a separate TV timer box or TV tuner in the TV set, at the user's premises, and

the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet, wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored,

an image indicative of the content associated with said overlay-enabling digital data, and

an overlay activation criterion; and

(b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said activation criterion is met, wherein generating an overlay includes:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

2. The method according to claim **1**, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user profile.

3. The method according to claim **1**, further including:

receiving a command from a user at said user premises; and

responsive to said command, resizing said first portion and/or said second portion of said first display screen.

4. The method according to claim **1**, wherein the content stored at said website enables streaming of digital data over the Internet; and

said method further including: pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

5. The method according to claim **1**, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein said generating an overlay further includes within said first display said one or more second images.

6. The method according to claim **1**, wherein the overlay-enabling digital data is supplementary or complementary to the video signals.

7. The method according to claim **1**, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

8. The method according to claim **1**, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

9. The method according to claim **1**, wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.

10. The method according to claim **5**, further including:

periodically accessing a web server for downloading said overlay-enabling digital data;

extracting from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieving and storing digital content from said web sites; and

if the overlay activation criterion is met and a user command that is associated with an image from amongst said one or more second images is identified, displaying the respective image from amongst the second images, accessing the respective web site associated with the displayed image and extracting and buffering content from the website.

11. The method according to claim **5**, further comprising displaying a respective IP content when a corresponding one of said one or more second images is selected.

12. The method according to claim **7**, including selecting specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

13. A TV-Internet Integration circuit for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the TV-Internet Integration Box comprising:

a combiner circuit at a user's premises coupled to a separate TV tuner box or TV tuner, wherein

the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner, and an Internet data input providing overlay-enabling digital data over the Internet, wherein

said video signals and said overlay-enabling digital data are received at the combiner circuit at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored;

an image indicative of the content associated with said overlay-enabling digital data; and

an overlay activation criterion, wherein

the combiner circuit is responsive to an overlay activation criterion being met for generating a corresponding overlay, including:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, and generate a second video display screen including at least a portion which corresponds to said content; and

a video output interface, coupled to or integrated within the combiner circuit and configured to be coupled to a video input of said TV set and to display said first display screen or said second video display screen.

14. The TV-Internet Integration circuit according to claim 13, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user-profile.

15. The TV-Internet Integration circuit according to claim 13, further including:

a command input for receiving a command from a user at said user premises; and

a frame adjuster for resizing said first portion and/or said second portion of said first display screen in response to said command.

16. The TV-Internet Integration circuit according to claim 13, further including:

a receiver for receiving a digital data stream, wherein the stream of the digital data is enabled by the content stored at said website; and

a processing unit for pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

17. The TV-internet Integration circuit according to claim 13, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored,

and wherein the combiner circuit is configured to:

periodically access a web server for downloading said overlay-enabling digital data;

extract from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieve and store digital content from said web sites; and

if the overlay activation criterion is met, and a user command that is associated with an image from amongst said one or more second images is identified, display the respective image from amongst the second images, access the respective web site associated with the displayed image and extract and buffer content from the website.

18. The TV-Internet Integration circuit according to claim 13, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

19. The TV-Internet Integration circuit according to claim 13, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

20. The TV-Internet Integration circuit according to claim 13, wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.

21. The TV-Internet Integration circuit according to claim 18, wherein the icon is colored so as to allow user selection of a specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 9,407,969 B2
APPLICATION NO. : 13/336189
DATED : August 2, 2016
INVENTOR(S) : Merlin

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the claims,

In claim 13, line 4 (column 10, line 30):

"TV-Internet Integration Box" is replaced with "TV-Internet Integration circuit."

Signed and Sealed this
Twentieth Day of September, 2016

Michelle K. Lee

Michelle K. Lee
Director of the United States Patent and Trademark Office

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
17/867,612	07/18/2022	2425	1720	103692.0001US4re	21	2

CONFIRMATION NO. 8539

FILING RECEIPT

24392
FISH IP LAW, LLP
2603 Main Street
Suite 1000
Irvine, CA 92614

OC000000135338525

Date Mailed: 07/22/2022

Receipt is acknowledged of this reissue patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

Inventor(s)

Yakkov MERLIN, Raanana, ISRAEL;

Applicant(s)

TVNGO LTD. (BVI), Amsterdam, NETHERLANDS, Assignee (with 37 CFR 1.172 Interest);

Assignment For Published Patent Application

TVNGO LTD. (BVI), Amsterdam, NETHERLANDS

Power of Attorney: The patent practitioners associated with Customer Number 24392

Domestic Priority data as claimed by applicant

This application is a REI of 13/336,189 12/23/2011 PAT 9407969
which is a CON of 11/794,825 07/06/2007 PAT 8132220
which is a 371 of PCT/IL2005/000035 01/11/2005

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 07/21/2022
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 17/867,612**
Projected Publication Date: None, application is not eligible for pre-grant publication
Non-Publication Request: No
Early Publication Request: No
** **SMALL ENTITY** **
Title

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Preliminary Class

725

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative,

this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 17/867,612

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	160		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	350		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	1160		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	21 minus 20 =	* 1	x 50 =	50	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2 minus 3 =	*	x 240 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	1720		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

LexisNexis

User Name: Renee Preston
Date and Time: Tuesday, July 26, 2022 7:25:00 AM EDT
Job Number: 176006117

Document (1)

1. *20-1837, TVnGO Ltd. (BVI) v. LG Electronics, Inc.*

Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
Dockets	-None-

20-1837, TVnGO Ltd. (BVI) v. LG Electronics, Inc.

US Circuit Court of Appeals - Federal Circuit

This case was retrieved on 07/26/2022

Header

Case Number: 20-1837
Date Filed: 05/26/2020
Date Full Case Retrieved: 07/26/2022
Status: Closed 06/28/2021
Misc: (999) 830: Patent Infringement (Fed. Qst.); Appeal

Participants

Litigants	Attorneys
TVNGO LTD. (BVI) **Plaintiff - Appellant**	Charles Cantine, Attorney Plaintiff - Appellant Dunlap Bennett & Ludwig PLLC 349 5th Avenue New York, NY 10016 917-338-1905 ccantine@dbllawyers.com Dunlap Bennett & Ludwig PLLC 349 5th Avenue New York, NY 10016 ccantine@dbllawyers.com AttorneyLabel: [LD NTC Retained]
LG ELECTRONICS INC. **Defendant - Appellee**	Eric Kraeutler, - Defendant - Appellee Morgan, Lewis & Bockius LLP 1701 Market Street Philadelphia, PA 19103 215-963-5000 eric.kraeutler@morganlewis.com Morgan, Lewis & Bockius LLP 1701 Market Street Philadelphia, PA 19103 eric.kraeutler@morganlewis.com AttorneyLabel: [LD NTC Retained]
	Natalie A. Bennett, Esq., - Defendant - Appellee Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue NW Washington, DC 20004 202-739-5559 natalie.bennett@morganlewis.com Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue NW Washington, DC 20004 natalie.bennett@morganlewis.com AttorneyLabel: [COR NTC Retained]
	Jeremy Deane Peterson, Esq., Attorney Defendant - Appellee PV Law LLP Suite 440 5335 Wisconsin Avenue, NW Washington, DC 20015 202-871-0140 jeremy.peterson@pvuslaw.com PV Law LLP 5335 Wisconsin Avenue, NW Washington, DC 20015 jeremy.peterson@pvuslaw.com AttorneyLabel: [COR NTC Retained]

Renee Preston

20-1837, TVnGO Ltd. (BVI) v. LG Electronics, Inc.

Litigants	Attorneys
	William R. Peterson Defendant - Appellee Morgan, Lewis & Bockius LLP 1000 Louisiana Houston, TX 77002 713-890-5000 william.peterson@morganlewis.com Morgan, Lewis & Bockius LLP 1000 Louisiana Houston, TX 77002 william.peterson@morganlewis.com AttorneyLabel: [COR NTC Retained]
LG ELECTRONICS USA, INC. **Defendant - Appellee**	Eric Kraeutler, - Defendant - Appellee Morgan, Lewis & Bockius LLP 1701 Market Street Philadelphia, PA 19103 215-963-5000 eric.kraeutler@morganlewis.com Morgan, Lewis & Bockius LLP 1701 Market Street Philadelphia, PA 19103 eric.kraeutler@morganlewis.com AttorneyLabel: [LD NTC Retained]
	Natalie A. Bennett, Esq., - Defendant - Appellee Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue NW Washington, DC 20004 202-739-5559 natalie.bennett@morganlewis.com Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue NW Washington, DC 20004 natalie.bennett@morganlewis.com AttorneyLabel: [COR NTC Retained]
	Jeremy Deane Peterson, Esq., Attorney Defendant - Appellee PV Law LLP Suite 440 5335 Wisconsin Avenue, NW Washington, DC 20015 202-871-0140 jeremy.peterson@pvuslaw.com PV Law LLP 5335 Wisconsin Avenue, NW Washington, DC 20015 jeremy.peterson@pvuslaw.com AttorneyLabel: [COR NTC Retained]
	William R. Peterson Defendant - Appellee Morgan, Lewis & Bockius LLP 1000 Louisiana Houston, TX 77002 713-890-5000 william.peterson@morganlewis.com Morgan, Lewis & Bockius LLP 1000 Louisiana Houston, TX 77002 william.peterson@morganlewis.com AttorneyLabel: [COR NTC Retained]

Additional Case

Additional Case Information

Civil Private

Appeal from: United States District Court for the District of New Jersey

Renee Preston

20-1837, TVnGO Ltd. (BVI) v. LG Electronics, Inc.

Additional Case Information

District: 0312 Division: 1 CaseNumber: 1:18-cv-10238-RMB-KMW DateFiled: 06/06/2018
Trial Judge: Renee Marie Bumb , Judge
Date NOA Filed: 05/15/2020

Proceedings

Date	#	Proceeding Text	Details
05/26/2020		Appeal docketed. Received: 05/18/2020. [696906]Entry of Appearance due 06/09/2020. Certificate of Interest is due on 06/09/2020. Docketing Statement due 06/09/2020. Appellant's brief is due 07/27/2020. [MMA]	
06/09/2020		Entry of appearance for Eric Kraeutler as principal counsel for Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc.. Service: 06/09/2020 by email. [700077] [20-1837] [Eric Kraeutler]	
06/09/2020		Entry of appearance for William R. Peterson as of counsel for Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc.. Service: 06/09/2020 by email. [700078] [20-1837] [William Peterson]	
06/09/2020		Entry of appearance for Natalie A. Bennett as of counsel for Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc.. Service: 06/09/2020 by email. [700083] [20-1837] [Natalie Bennett]	
06/09/2020		Entry of appearance for Jeremy D. Peterson as of counsel for Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc.. Service: 06/09/2020 by email. [700086] [20-1837] [Jeremy Peterson]	
06/09/2020		Certificate of Interest for Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc.. Service: 06/09/2020 by email. [700088] [20-1837] [Eric Kraeutler]	
06/09/2020		Docketing Statement for the Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc.. Service: 06/09/2020 by email. [700089] [20-1837] [Eric Kraeutler]	
06/09/2020		Entry of appearance for Charles Cantine as principal counsel for Appellant TVnGO Ltd. (BVI). Service: 06/09/2020 by email, US mail. [700127] [20-1837] [Charles Cantine]	
06/09/2020		Certificate of Interest for Appellant TVnGO Ltd. (BVI). Service: 06/09/2020 by email, US mail. [700129] [20-1837] [Charles Cantine]	
06/09/2020		Docketing Statement for the Appellant TVnGO Ltd. (BVI). Service: 06/09/2020 by email, US mail. [700130] [20-1837] [Charles Cantine]	

Renee Preston

Date	#	Proceeding Text	Details
06/09/2020		Transcript Purchase Order Form for the Appellant TVnGO Ltd. (BVI) indicating that a request is made to the reporter for a transcript. Service: 06/09/2020 by email, US mail. [700186] [20-1837] [Charles Cantine]	
06/11/2020		REMINDER: All counsel of record are reminded of their responsibility per Fed. Cir. R. 47.4(a) and Fed. Cir. R. 47.3 to promptly submit an amended Certificate of Interest (COI) and/or Entry of Appearance (EOA) as information changes during the pendency of the appeal. Failure to comply with these Rules may delay the timely processing of your case or result in adverse action. [Clerk's Note: Attorney Charles Cantine's contact information listed on his EOA does not match the information on his account.] [700586] [CAB]	
07/27/2020		Amended Certificate of Interest for Appellant TVnGO Ltd. (BVI). Service: 07/27/2020 by email. [710128] [20-1837] [Charles Cantine]	
07/27/2020		MODIFIED ENTRY: OPENING BRIEF FILED for Appellant TVnGO Ltd. (BVI). Number of Pages: 37. Service: 07/27/2020 by email. Unless ordered otherwise, any responsive deadline runs from the date of service of this brief. See Fed. Cir. R. 31. [710239] --[Edited 08/03/2020 by LMN - compliance review complete] [Charles Cantine]	
08/07/2020		Amended Certificate of Interest for Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc.. Service: 08/07/2020 by email. [713515] [20-1837] [Natalie Bennett]	
08/10/2020		MOTION of Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc. to extend the time to 10/13/2020 to file the Brief of Appellees. [Consent: unopposed]. Service: 08/10/2020 by email. [713702] [20-1837] [Natalie Bennett]	
08/11/2020		**TEXT ONLY** ORDER granting motion to extend time to file brief filed by Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc. The response brief is due 10/13/2020. Service as of this date by the Clerk of Court. This order has been issued without an attached document and is official and binding. [714168] [EKD]	
10/13/2020		RESPONSE BRIEF FILED by Appellees LG Electronics, Inc. and LG Electronics U.S.A., Inc. Service: 10/13/2020 by email. [728298] [20-1837] This brief is non-compliant. See Doc. No. [William Peterson]	
10/22/2020		NOTICE OF NON-COMPLIANCE: The submission of Appellees LG Electronics U.S.A., Inc. and LG Electronics, Inc.,	

Date	#	Proceeding Text	Details
		Response Brief , is not in compliance with the rules of this court (see attached). Compliant document due on 10/29/2020. Unless ordered otherwise, the deadline for any responsive filing runs from service of the original version. Service as of this date by the Clerk of Court. [730915] [MMA]	
10/26/2020		MODIFIED ENTRY: CORRECTED BRIEF FILED by Appellees LG Electronics U.S.A., Inc. and LG Electronics, Inc. Service: 10/26/2020 by email. [731513]--[Edited 11/04/2020 by MMA - Reason: compliance review complete] [William Peterson]	
11/03/2020		MODIFIED ENTRY: REPLY BRIEF FILED by Appellant TVnGO Ltd. (BVI). Service: 11/03/2020 by email. Unless ordered otherwise, any responsive deadline runs from the date of service of this brief. See Fed. Cir. R. 31. [733288]--[Edited 11/04/2020 by MMA - Reason: compliance review complete] [Charles Cantine]	
11/10/2020		MODIFIED ENTRY: APPENDIX FILED by Appellant TVnGO Ltd. (BVI). Service: 11/10/2020 by email. [734768]--[Edited 12/04/2020 by MMA - Reason: compliance review complete] [Charles Cantine]	
12/04/2020		Notice to counsel: The Clerk's Office directs that outstanding paper copies of all briefs and appendices in this case must be submitted on or before December 18, 2020. See Administrative Order No. 20-01 (Mar. 20, 2020). [740430] [MMA]	
12/04/2020		Notice to Advise of Scheduling Conflicts. Arguing counsel must advise of, and show good cause for, any scheduling conflicts during the upcoming court session months listed in the attached notice. The Response to Notice to Advise of Scheduling Conflicts can be found here. The Oral Argument Guide can be found here. [740431] [MMA]	
12/07/2020		6 paper copies of Doc. No. received from LG Electronics Inc. and LG Electronics USA, Inc. [740855] [MJL]	
12/08/2020		6 paper copies of Doc. No. , , received from Appellant TVnGO Ltd. (BVI). [741713] [VDW]	
12/09/2020		Notice from Appellant TVnGO Ltd. (BVI) regarding conflicts with oral argument. Service: 12/09/2020 by email. [741338] [20-1837] [Charles Cantine]	
12/09/2020		The following conflict dates submitted by Charles Cantine for TVnGO Ltd. (BVI) have been accepted by the court: 05/03/2021, 05/04/2021, 05/05/2021, 05/06/2021, 05/07/2021. [741366] [JAB]	

Date	#	Proceeding Text	Details
12/10/2020		Notice from Appellees LG Electronics Inc. and LG Electronics USA, Inc. regarding conflicts with oral argument. Service: 12/10/2020 by email. [741968] [20-1837] [William Peterson]	
12/11/2020		The following conflict dates submitted by William R. Peterson for LG Electronics USA, Inc. and LG Electronics Inc. have been accepted by the court: 06/07/2021, 06/08/2021, 06/09/2021, 06/10/2021, 06/11/2021, 07/06/2021, 07/07/2021, 07/08/2021, 07/09/2021. [741988] [JAB]	
12/18/2020		NOTICE OF TELEPHONIC ORAL ARGUMENT. Panel: 2102E. Case scheduled February 2, 2021. Response to Notice of Oral Argument due: 01/15/2021. The Clerk's Office will provide additional instructions to counsel at least one week ahead of argument. Please review the attached Notice. The response to notice of oral argument form can be found here. The Oral Argument Guide can be found here. Service as of this date by the Clerk of Court. [743939] [JAB]	
01/11/2021		Response to notice of oral argument from Appellees LG Electronics Inc. and LG Electronics USA, Inc.. Service: 01/11/2021 by email. [748588] [20-1837] [William Peterson]	
01/12/2021		Response to notice of oral argument from Appellant TVnGO Ltd. (BVI). Service: 01/12/2021 by email. [748755] [20-1837] [Charles Cantine]	
01/15/2021		Clerk's letter to Appellant TVnGO Ltd. (BVI) and Appellees LG Electronics Inc. and LG Electronics USA, Inc. regarding Telephonic Argument Orientation. Service as of this date by the Clerk of Court. [749776] [JAB]	
02/02/2021		Submitted after ORAL ARGUMENT to Panel: Prost, Chief Judge; Schall, Circuit Judge and Reyna, Circuit Judge.Arguing counsel: Charles Cantine for TVnGO Ltd. (BVI) and William R. Peterson for LG Electronics USA, Inc. and LG Electronics Inc.Oral Argument Audio available here. [753357]--[Edited 06/25/2021 by JCP to fix arguing attorney for appellees] [JCP]	
06/28/2021		OPINION filed for the court by Prost, Circuit Judge; Schall, Circuit Judge and Reyna, Circuit Judge. Nonprecedential Opinion. Service as of this date by the Clerk of Court. [782818] [MVH]	
06/28/2021		JUDGMENT. AFFIRMED. Terminated on the merits after oral argument. COSTS: Costs taxed against Appellant(s). Mandate to issue	

Date	#	Proceeding Text	Details
		in due course. For information regarding costs, petitions for rehearing, and petitions for writs of certiorari click here. Service as of this date by the Clerk of Court. [782819] [MVH]	
08/04/2021		Mandate issued to the United States District Court for the District of New Jersey. Service as of this date by the Clerk of Court. [790626] [MVH]	

Copyright © LexisNexis CourtLink, Inc. All Rights Reserved.
*** THIS DATA IS FOR INFORMATIONAL PURPOSES ONLY ***

End of Document

LexisNexis

User Name: Renee Preston
Date and Time: Tuesday, July 26, 2022 7:27:00 AM EDT
Job Number: 176006158

Document (1)

1. *1:18cv10238, Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al*
   Client/Matter: -None-
   Search Terms: 9407969 or 9,407,969
   Search Type: Terms and Connectors
   Narrowed by:

Content Type	Narrowed by
Dockets	-None-

1:18cv10238, Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

US District Court Docket

United States District Court, New Jersey

(Camden)

This case was retrieved on 07/26/2022

Header

Case Number: 1:18cv10238
Date Filed: 06/06/2018
Assigned To: Judge Renee Marie Bumb
Referred To: Magistrate Judge K. M. Williams
Nature of Suit: Patent (830)
Cause: Patent Infringement
Lead Docket: None
Other Docket: USCA - Federal Circuit, 20-01837
Jurisdiction: Federal Question

Class Code: Closed
Closed: 04/17/2020
Statute: 15:1126
Jury Demand: Both
Demand Amount: $0
NOS Description: Patent

Participants

Litigants

TVnGO LTD. (BVI)
Plaintiff

LG Electronics, Inc.,
Defendant

Attorneys

KATHERINE HARIHAR
LEAD ATTORNEY;ATTORNEY TO BE NOTICED
[Terminated: 02/04/2020]
TROUTMAN SANDERS LLP
875 Third Ave
New York, NY 10022
USA
212-704-6099 Email:Katherine.Harihar@troutman.Com

TIMOTHY HAROLD CAINE
ATTORNEY TO BE NOTICED
[Terminated: 06/06/2019]
KING & SPALDING LLP
1180 Avenue Of The Americas
New York, NY 10036
USA
212-556-2231

MATTHEW TRAVIS EYET
ATTORNEY TO BE NOTICED
EYET LAW LLC
7 Livingston Avenue Suite 1105
New Brunswick, NJ 08901
USA
732-379-8617 Email:Meyet@eyetlaw.Com

LIZA M. WALSH
LEAD ATTORNEY;ATTORNEY TO BE NOTICED
WALSH PIZZI O'REILLY FALANGA LLP
Three Gateway Center 100 Mulberry Street 15th Floor

Renee Preston

Litigants	Attorneys
	Newark, NJ 07102 USA 973.757.1100 Email:Lwalsh@walsh.Law SELINA MIRIAM ELLIS ATTORNEY TO BE NOTICED WALSH PIZZI O'REILLY FALANGA LLP Three Gateway Center 100 Mulberry Street 15th Floor Newark, NJ 07102 USA 973-757-1100 Email:Sellis@walsh.Law
LG Electronics U.S.A., Inc. **Defendant**	LIZA M. WALSH LEAD ATTORNEY;ATTORNEY TO BE NOTICED WALSH PIZZI O'REILLY FALANGA LLP Three Gateway Center 100 Mulberry Street 15th Floor Newark, NJ 07102 USA 973.757.1100 Email:Lwalsh@walsh.Law SELINA MIRIAM ELLIS ATTORNEY TO BE NOTICED WALSH PIZZI O'REILLY FALANGA LLP Three Gateway Center 100 Mulberry Street 15th Floor Newark, NJ 07102 USA 973-757-1100 Email:Sellis@walsh.Law
LG Electronics, Inc., **Counter Claimant**	LIZA M. WALSH LEAD ATTORNEY;ATTORNEY TO BE NOTICED WALSH PIZZI O'REILLY FALANGA LLP Three Gateway Center 100 Mulberry Street 15th Floor Newark, NJ 07102 USA 973.757.1100 Email:Lwalsh@walsh.Law SELINA MIRIAM ELLIS ATTORNEY TO BE NOTICED WALSH PIZZI O'REILLY FALANGA LLP Three Gateway Center 100 Mulberry Street 15th Floor Newark, NJ 07102 USA 973-757-1100 Email:Sellis@walsh.Law
LG Electronics U.S.A., Inc. **Counter Claimant**	LIZA M. WALSH LEAD ATTORNEY;ATTORNEY TO BE NOTICED WALSH PIZZI O'REILLY FALANGA LLP Three Gateway Center 100 Mulberry Street 15th Floor Newark, NJ 07102 USA 973.757.1100 Email:Lwalsh@walsh.Law SELINA MIRIAM ELLIS ATTORNEY TO BE NOTICED WALSH PIZZI O'REILLY FALANGA LLP Three Gateway Center 100 Mulberry Street 15th Floor Newark, NJ 07102 USA 973-757-1100 Email:Sellis@walsh.Law
TVnGO LTD. (BVI) **Counter Defendant**	TIMOTHY HAROLD CAINE ATTORNEY TO BE NOTICED [Terminated: 06/06/2019]

Litigants

Attorneys

KING & SPALDING LLP
1180 Avenue Of The Americas
New York, NY 10036
USA
212-556-2231

MATTHEW TRAVIS EYET
ATTORNEY TO BE NOTICED
EYET LAW LLC
7 Livingston Avenue Suite 1105
New Brunswick, NJ 08901
USA
732-379-8617 Email:Meyet@eyetlaw.Com

Proceedings

#	Date	Proceeding Text	Source
1	06/06/2018	COMPLAINT against LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC. (Filing and Admin fee $ 400 receipt number 0312-8792992) with JURY DEMAND, filed by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G, # 8 Exhibit H, # 9 Exhibit I, # 10 Exhibit J, # 11 Exhibit K, # 12 Exhibit L, # 13 Exhibit M, # 14 Exhibit N, # 15 Exhibit O, # 16 Civil Cover Sheet)(EYET, MATTHEW) (Entered: 06/06/2018)	
2	06/07/2018	Corporate Disclosure Statement by TVnGO LTD. (BVI). (EYET, MATTHEW) (Entered: 06/07/2018)	
	06/07/2018	Case assigned to Judge John Michael Vazquez and Magistrate Judge Steven C. Mannion. (jr) (Entered: 06/07/2018)	
3	06/07/2018	SUMMONS ISSUED as to LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC., Attached is the official court Summons, please fill out Defendant and Plaintiffs attorney information and serve. Issued By *John Reilly* (jr) (Entered: 06/07/2018)	
4	06/07/2018	AO120 Patent Form filed. (jr) (Entered: 06/07/2018)	
	06/12/2018	Minute Entry for proceedings held before Judge John Michael Vazquez: Pursuant to Local Patent Rule 1.5 Patent Pilot Project, case shall be reassigned to a designated patent judge. (ro,) (Entered: 06/12/2018)	
5	06/15/2018	TEXT ORDER REALLOCATING AND REASSIGNING CASE. Case reallocated to Camden and reassigned to Judge Renee Marie Bumb and Magistrate Judge Karen M. Williams for all further proceedings. Judge John Michael Vazquez, Magistrate Judge Steven C. Mannion no longer assigned to case. So Ordered by Chief Judge Jose L. Linares on 6/15/18. (ak,) (Entered: 06/15/2018)	
6	07/03/2018	Letter from Liza M. Walsh to the Hon. Karen M. Williams. U.S.M.J. encl. Stipulation and proposed Order for Extension of Time. (Attachments: # 1 Stipulation and proposed Order)(WALSH, LIZA) (Entered: 07/03/2018)	
7	07/06/2018	NOTICE of Appearance by LIZA M. WALSH on behalf of LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC., (WALSH, LIZA) (Entered: 07/06/2018)	
8	07/06/2018	NOTICE of Appearance by SELINA MIRIAM ELLIS on behalf of LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC., (ELLIS, SELINA) (Entered: 07/06/2018)	
9	07/06/2018	STIPULATION AND ORDER that the time for Defendants to	

#	Date	Proceeding Text	Source
		answer, move, or otherwise respond to Plaintiff's Complaint is extended to 9/21/2018. Signed by Magistrate Judge Karen M. Williams on 7/6/2018. (tf.) (Entered: 07/06/2018)	
10	09/12/2018	MOTION for Leave to Appear Pro Hac Vice Joseph Diamante, Esq. by TVnGO LTD. (BVI). (Attachments: # 1 Certification Diamante, # 2 Certification Eyet, # 3 Text of Proposed Order, # 4 Certificate of Service)(EYET, MATTHEW) (Entered: 09/12/2018)	
11	09/12/2018	MOTION for Leave to Appear Pro Hac Vice Charles E. Cantine, Esq. by TVnGO LTD. (BVI). (Attachments: # 1 Certification Cantine, # 2 Certification Eyet, # 3 Text of Proposed Order, # 4 Certificate of Service)(EYET, MATTHEW) (Entered: 09/12/2018)	
	09/13/2018	Set/Reset Deadlines as to 11 MOTION for Leave to Appear Pro Hac Vice Charles E. Cantine, Esq., 10 MOTION for Leave to Appear Pro Hac Vice Joseph Diamante, Esq.. Motion set for 10/15/2018 before Magistrate Judge Karen M. Williams. Unless otherwise directed by the Court, this motion will be decided on the papers and no appearances are required. Note that this is an automatically generated message from the Clerk's Office and does not supersede any previous or subsequent orders from the Court. (dmr) (Entered: 09/13/2018)	
12	09/14/2018	NOTICE of Appearance by TIMOTHY HAROLD CAINE on behalf of TVnGO LTD. (BVI) (CAINE, TIMOTHY) (Entered: 09/14/2018)	
13	09/19/2018	Letter from Liza M. Walsh to the Hon. Karen M. Williams, U.S.M.J. encl. Stipulation and proposed Order for Extension of Time. (Attachments: # 1 Stipulation and proposed Order)(WALSH, LIZA) (Entered: 09/19/2018)	
14	09/21/2018	STIPULATION AND ORDER for Extension of Time for Defendants to answer, move or otherwise respond to the Complaint by 9/28/2018. Signed by Magistrate Judge Karen M. Williams on 9/21/2018. (dmr) (Entered: 09/21/2018)	
15	09/26/2018	Consent MOTION for Leave to Appear Pro Hac Vice by LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC.,. (Attachments: # 1 Certification of Natalie A. Bennett, # 2 Certification of Liza M. Walsh, # 3 Statement in Lieu of Brief, # 4 Text of Proposed Order, # 5 Certificate of Service)(WALSH, LIZA) (Entered: 09/26/2018)	
	09/26/2018	Set/Reset Deadlines as to 15 Consent MOTION for Leave to Appear Pro Hac Vice . Motion set for 11/5/2018 before Magistrate Judge Karen M. Williams. Unless otherwise directed by the Court, this motion will be decided on the papers and no appearances are required. Note that this is an automatically generated message from the Clerk's Office and does not supersede any previous or subsequent orders from the Court. (dmr) (Entered: 09/26/2018)	
16	09/28/2018	ANSWER to Complaint with JURY DEMAND , COUNTERCLAIM against TVnGO LTD. (BVI) by LG ELECTRONICS, INC.,, LG ELECTRONICS U.S.A., INC..(WALSH, LIZA) (Entered: 09/28/2018)	
17	09/28/2018	Corporate Disclosure Statement by LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC.,. (WALSH, LIZA) (Entered: 09/28/2018)	
18	10/01/2018	Order Initial Conference set for 12/6/2018 at 10:00 AM in Room 2040 before Magistrate Judge Karen M. Williams. Signed by Magistrate Judge Karen M. Williams on 10/1/2018. (dmr) (Entered: 10/01/2018)	
19	10/15/2018	ORDER Granting 10 Motion for Leave to Appear Pro Hac Vice as to Joseph Diamante, Esq., etc. Signed by Magistrate Judge Karen M. Williams on 10/15/2018. (dmr) (Main Document 19 replaced on 10/16/2018) (dmr,). (Entered: 10/16/2018)	

#	Date	Proceeding Text	Source
20	10/15/2018	ORDER Granting 11 Motion for Leave to Appear Pro Hac Vice as to Charles E. Cantine, Esq., etc. Signed by Magistrate Judge Karen M. Williams on 10/15/2018. (dmr) (Entered: 10/16/2018)	
21	10/15/2018	ORDER Granting 15 Motion for Leave to Appear Pro Hac Vice as to Natalie A. Bennett, Esq., etc. Signed by Magistrate Judge Karen M. Williams on 10/15/2018. (dmr) (Entered: 10/16/2018)	
22	10/16/2018	Notice of Request by Pro Hac Vice Natalie A. Bennett to receive Notices of Electronic Filings. (Pro Hac Vice fee $ 150 receipt number 0312-9097841.) (WALSH, LIZA) (Entered: 10/16/2018)	
	10/17/2018	Pro Hac Vice counsel, NATALIE A. BENNETT, ESQ, has been added to receive Notices of Electronic Filing. Pursuant to L.Civ.R. 101.1, only local counsel are entitled to sign and file papers, enter appearances and receive payments on judgments, decrees or orders. (dmr) (Entered: 10/17/2018)	
23	10/19/2018	MOTION to Dismiss Count Eleven of Defendants' Counterclaims, and Motion to Strike Defendants' Thirteenth Affirmative Defense by TVnGO LTD. (BVI). Responses due by 11/5/2018 (Attachments: # 1 Brief, # 2 Declaration of Timothy H. Caine, Esq., # 3 Exhibit A, # 4 Exhibit B, # 5 Exhibit C, # 6 Exhibit D, # 7 Exhibit E, # 8 Exhibit F, # 9 Exhibit G, # 10 Exhibit H, # 11 Exhibit I, # 12 Text of Proposed Order, # 13 Certificate of Service)(EYET, MATTHEW) (Entered: 10/19/2018)	
	10/22/2018	Set/Reset Deadlines as to 23 MOTION to Dismiss Count Eleven of Defendants' Counterclaims, and Motion to Strike Defendants' Thirteenth Affirmative Defense. Motion set for 11/19/2018 before Judge Renee Marie Bumb. Unless otherwise directed by the Court, this motion will be decided on the papers and no appearances are required. Note that this is an automatically generated message from the Clerk's Office and does not supersede any previous or subsequent orders from the Court. (dmr) (Entered: 10/22/2018)	
24	10/22/2018	Consent MOTION for Leave to Appear Pro Hac Vice by LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC.,. (Attachments: # 1 Certification of Collin W. Park, # 2 Certification of Eric Kraeutler, # 3 Certification of Ghee J. Lee, # 4 Certification of Liza M. Walsh, # 5 Statement, # 6 Text of Proposed Order, # 7 Certificate of Service)(WALSH, LIZA) (Entered: 10/22/2018)	
	10/23/2018	Set/Reset Deadlines as to 24 Consent MOTION for Leave to Appear Pro Hac Vice . Motion set for 11/19/2018 before Magistrate Judge Karen M. Williams. Unless otherwise directed by the Court, this motion will be decided on the papers and no appearances are required. Note that this is an automatically generated message from the Clerk's Office and does not supersede any previous or subsequent orders from the Court. (dmr) (Entered: 10/23/2018)	
25	11/05/2018	BRIEF in Opposition filed by LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC., re 23 MOTION to Dismiss Count Eleven of Defendants' Counterclaims, and Motion to Strike Defendants' Thirteenth Affirmative Defense (Attachments: # 1 Certificate of Service)(WALSH, LIZA) (Entered: 11/05/2018)	
26	11/13/2018	REPLY BRIEF to Opposition to Motion filed by TVnGO LTD. (BVI) re 23 MOTION to Dismiss Count Eleven of Defendants' Counterclaims, and Motion to Strike Defendants' Thirteenth Affirmative Defense (Attachments: # 1 Certificate of Service)(EYET, MATTHEW) (Entered: 11/13/2018)	
27	11/28/2018	MOTION for Leave to Appear Pro Hac Vice by LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC.,. (Attachments: # 1 Certification of Jeremy D. Peterson, # 2 Certification of Liza M. Walsh, # 3 Statement, # 4 Text of	

#	Date	Proceeding Text	Source
		Proposed Order, # 5 Certificate of Service)(WALSH, LIZA) (Entered: 11/28/2018)	
	11/28/2018	Pro Hac Vice fee: $ 300, receipt number CAM10089 for attorneys Charles E. Cantine and Joseph Diamante (rtm,) (Entered: 11/28/2018)	
28	11/28/2018	Notice of Request by Pro Hac Vice Joseph Diamante to receive Notices of Electronic Filings. (EYET, MATTHEW) (Entered: 11/28/2018)	
29	11/28/2018	Notice of Request by Pro Hac Vice Charles E. Cantine to receive Notices of Electronic Filings. (EYET, MATTHEW) (Entered: 11/28/2018)	
	11/29/2018	Set/Reset Deadlines as to 27 MOTION for Leave to Appear Pro Hac Vice . Motion set for 1/7/2019 before Magistrate Judge Karen M. Williams. Unless otherwise directed by the Court, this motion will be decided on the papers and no appearances are required. Note that this is an automatically generated message from the Clerk`s Office and does not supersede any previous or subsequent orders from the Court. (dmr) (Entered: 11/29/2018)	
	11/29/2018	Pro Hac Vice counsel, JOSEPH DIAMANTE and CHARLES E. CANTINE, have been added to receive Notices of Electronic Filing. Pursuant to L.Civ.R. 101.1, only local counsel are entitled to sign and file papers, enter appearances and receive payments on judgments, decrees or orders. (dmr) (Entered: 11/29/2018)	
30	11/29/2018	Joint Discovery Plan by TVnGO LTD. (BVI).(EYET, MATTHEW) (Entered: 11/29/2018)	
31	12/05/2018	Letter from Liza M. Walsh to Honorable Karen M. Williams, U.S.M.J. re 30 Joint Discovery Plan. (Attachments: # 1 Proposed Joint Discovery Plan with Attachment A)(WALSH, LIZA) (Entered: 12/05/2018)	
32	12/06/2018	ORDER Granting 24 Motion for Leave to Appear Pro Hac Vice as to Collin W. Park, Esquire, etc. Signed by Magistrate Judge Karen M. Williams on 12/6/2018. (dmr) (Entered: 12/06/2018)	
33	12/06/2018	ORDER Granting 27 Motion for Leave to Appear Pro Hac Vice as to Jeremy D. Peterson, Esquire, etc. Signed by Magistrate Judge Karen M. Williams on 12/6/2018. (dmr) (Entered: 12/06/2018)	
34	12/06/2018	SCHEDULING ORDER: Telephone Status Conference set for 5/17/2019 at 10:00 AM before Magistrate Judge Karen M. Williams, etc. Signed by Magistrate Judge Karen M. Williams on 12/6/2018. (dmr) (Entered: 12/06/2018)	
	12/06/2018	Minute Entry for proceedings held before Magistrate Judge Karen M. Williams: In-Person Initial Conference held on 12/6/2018. (nar) (Entered: 12/06/2018)	
35	12/07/2018	Notice of Request by Pro Hac Vice Collin W. Park to receive Notices of Electronic Filings. (Pro Hac Vice fee $ 150 receipt number 0312-9225198.) (WALSH, LIZA) (Entered: 12/07/2018)	
36	12/07/2018	Notice of Request by Pro Hac Vice Ghee J. Lee to receive Notices of Electronic Filings. (Pro Hac Vice fee $ 150 receipt number 0312-9225219.) (WALSH, LIZA) (Entered: 12/07/2018)	
37	12/07/2018	Notice of Request by Pro Hac Vice Jeremy D. Peterson to receive Notices of Electronic Filings. (Pro Hac Vice fee $ 150 receipt number 0312-9225239.) (WALSH, LIZA) (Entered: 12/07/2018)	
38	12/07/2018	Notice of Request by Pro Hac Vice Eric Kraeutler to receive Notices of Electronic Filings. (Pro Hac Vice fee $ 150 receipt number 0312-9225249.) (WALSH, LIZA) (Entered: 12/07/2018)	
	12/10/2018	Pro Hac Vice counsel, COLLIN W. PARK, GHEE J LEE, JEREMY D. PETERSON and ERIC KRAEUTLER, has been added to receive Notices of Electronic Filing. Pursuant to L.Civ.R. 101.1, only local counsel are entitled to sign and file papers, enter	

#	Date	Proceeding Text	Source
		appearances and receive payments on judgments, decrees or orders. (rtm,) (Entered: 12/10/2018)	
39	02/08/2019	Letter from Matthew T. Eyet. (EYET, MATTHEW) (Entered: 02/08/2019)	
40	02/20/2019	Letter from Matthew T. Eyet requesting extension of time re 34 Scheduling Order. (EYET, MATTHEW) (Entered: 02/20/2019)	
41	02/22/2019	ORDER granting Plaintiff's letter request for an extension regarding infringement contentions, etc. Signed by Magistrate Judge Karen M. Williams on 2/22/2019. (dmr) (Entered: 02/22/2019)	
42	05/15/2019	STIPULATION (Proposed) Discover Confidentiality Order by TVnGO LTD. (BVI). (EYET, MATTHEW) (Entered: 05/15/2019)	
43	05/17/2019	Letter from Matthew T. Eyet requesting extension of time re 34 Scheduling Order. (EYET, MATTHEW) (Entered: 05/17/2019)	
44	05/17/2019	TEXT ORDER The Court has scheduled a telephone status conference for September 10, 2019 at 10:00 a.m. Counsel for plaintiff shall initiate the call. Ordered by Magistrate Judge Karen M. Williams on 5/17/19. (nar) (Entered: 05/17/2019)	
45	05/17/2019	Stipulated Discovery Confidentiality Order. Signed by Magistrate Judge Karen M. Williams on 5/17/2019. (dmr) (Entered: 05/20/2019)	
	05/17/2019	Minute Entry for proceedings held before Magistrate Judge Karen M. Williams: Telephone Status Conference held on 5/17/2019. (nar) (Entered: 05/21/2019)	
46	05/22/2019	SCHEDULING ORDER: Fact Discovery relating to claim construction due by 9/2/2019. Signed by Magistrate Judge Karen M. Williams on 5/21/2019. (tf,) (Entered: 05/22/2019)	
47	05/23/2019	OPINION. Signed by Judge Renee Marie Bumb on 5/23/2019. (dmr) (Entered: 05/23/2019)	
48	05/23/2019	ORDER Denying 23 Motion to Dismiss. Signed by Judge Renee Marie Bumb on 5/23/2019. (dmr) (Entered: 05/23/2019)	
49	06/03/2019	Mail Returned as Undeliverable. Mail sent to TIMOTHY HAROLD CAINE re 46 Scheduling Order (dmr) (Entered: 06/03/2019)	
50	06/06/2019	Notice to be terminated and withdraw from Notices of Electronic filing as to case. Attorney TIMOTHY HAROLD CAINE terminated. (EYET, MATTHEW) (Entered: 06/06/2019)	
51	06/27/2019	NOTICE of Change of Address by LIZA M. WALSH (WALSH, LIZA) (Entered: 06/27/2019)	
52	07/26/2019	Letter from Liza M. Walsh to the Hon. Karen M. Williams, U.S.M.J. re: regarding Defendants' Amended Answer and Counterclaims. (WALSH, LIZA) (Entered: 07/26/2019)	
53	07/29/2019	Letter from Liza M. Walsh to the Hon. Karen M. Williams, U.S.M.J. re: Defendants' Amended Answer and Counterclaims (CORRECTED) re 52 Letter. (WALSH, LIZA) (Entered: 07/29/2019)	
54	07/29/2019	ORDER Granting letter request for Defendants to file an Amended Answer and Counterclaims by 8/16/2019 and Plaintiff to answer the Amended Answer and Counterclaims by 9/16/2019. Signed by Magistrate Judge Karen M. Williams on 7/29/2019. (dmr) (Entered: 07/29/2019)	
55	07/30/2019	ORDER Granting letter request regarding Defendants filing an Amended Answer and Counterclaim by 8/16/2019 and Plaintiff filing a response by 9/6/2019. Signed by Magistrate Judge Karen M. Williams on 7/29/2019. (dmr) (Entered: 07/30/2019)	
56	08/07/2019	STATEMENT Joint Claim Construction and Prehearing Statement Pursuant to Local Patent Rule 4.3 by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit Joint Chart)(EYET, MATTHEW)	

#	Date	Proceeding Text	Source
		(Entered: 08/07/2019)	
57	08/16/2019	DEFENDANTS LG ELECTRONICS INC. AND LG ELECTRONICS U.S.A., INC.'S FIRST AMENDED ANSWER to Complaint with JURY DEMAND , COUNTERCLAIM against TVnGO LTD. (BVI) by LG ELECTRONICS, INC.., LG ELECTRONICS U.S.A., INC..(WALSH, LIZA) (Entered: 08/16/2019)	
58	09/06/2019	ANSWER to Counterclaim by TVnGO LTD. (BVI).(EYET, MATTHEW) (Entered: 09/06/2019)	
	09/10/2019	Minute Entry for proceedings held before Magistrate Judge Karen M. Williams: Telephone Status Conference held on 9/10/2019. (nar) (Entered: 09/10/2019)	
59	09/11/2019	SCHEDULING ORDER: Opening Markman Briefs shall be filed by 9/23/2019 and Responding Markman Briefs shall be filed by 11/22/2019, etc. Signed by Magistrate Judge Karen M. Williams on 9/11/2019. (dmr,) (Entered: 09/12/2019)	
60	09/23/2019	Letter from Liza M. Walsh to the Hon. Renee Marie Bumb, U.S.D.J. re: Markman hearing re 59 Scheduling Order. (WALSH, LIZA) (Entered: 09/23/2019)	
61	09/23/2019	MARKMAN OPENING BRIEF BY DEFENDANTS LG ELECTRONICS INC. AND LG ELECTRONICS U.S.A., INC. (Attachments: # 1 Declaration of W. LEO HOARTY with Ex. 1, # 2 Declaration of COLLIN W. PARK, # 3 Exhibit A-M TO PARK DECLARATION)(WALSH, LIZA) (Entered: 09/23/2019)	
62	09/23/2019	MARKMAN OPENING BRIEF BY PLAINTIFF TVnGO LTD. (BVI) (Attachments: # 1 Declaration of Charles E. Cantine, # 2 Exhibit 1 through 9 to Cantine Declaration)(EYET, MATTHEW) (Entered: 09/23/2019)	
	09/24/2019	CLERK'S QUALITY CONTROL MESSAGE - The Opening Brief 62 submitted by Matthew Eyet on 9/23/2019 contains an improper signature. Only Registered Users are permitted to sign electronically filed documents with an s/. PLEASE RESUBMIT THE SIGNATURE PAGE WITH A PROPER SCANNED SIGNATURE USING "EXHIBIT TO DOCUMENT" found under Other Documents and link it to Doc. 62 . This submission will remain on the docket unless otherwise ordered by the court. (dmr) (Entered: 09/24/2019)	
63	09/24/2019	Exhibit to 62 Markman Opening Brief by TVnGO LTD. (BVI). (Attachments: # 1 Declaration of Charles E. Cantine, Esq.)(EYET, MATTHEW) (Entered: 09/24/2019)	
64	09/26/2019	TEXT ORDER The Court has reviewed 60 parties joint request to reschedule the Markman hearing in this case. The Courts next available dates are January 8, 9, and 10, 2020. Counsel are kindly requested to advise the Court as soon as possible whether the parties are available on the new dates. So Ordered by Judge Renee Marie Bumb on 09/26/2019. (Costigan, Roberta) (Entered: 09/26/2019)	
65	10/02/2019	Letter from Matthew T. Eyet re 64 Order,. (EYET, MATTHEW) (Entered: 10/02/2019)	
66	10/03/2019	TEXT ORDER In light of 65 letter advising the Court of the parties availability, the Markman hearing in this case shall be held on January 8, 2020 beginning at 9 a.m. and continuing, if necessary, on January 9, 2020. So Ordered by Judge Renee Marie Bumb on 10/03/2019. (Costigan, Roberta) (Entered: 10/03/2019)	
67	11/22/2019	MARKMAN RESPONSE BRIEF re 62 Markman Opening Brief (Attachments: # 1 Supplemental Declaration of W. Leo Hoarty, # 2 Supplemental Declaration of Collin W. Park with Ex. N-O)(WALSH, LIZA) (Entered: 11/22/2019)	

#	Date	Proceeding Text	Source
68	11/22/2019	MARKMAN RESPONSE BRIEF re 61 Markman Opening Brief (Attachments: # 1 Supplemental Declaration of Charles E. Cantine, # 2 Exhibit 10 to Cantine Decl., # 3 Exhibit 11 to Cantine Decl., # 4 Exhibit 12 to Cantine Decl., # 5 Exhibit 13 to Cantine Decl.)(EYET, MATTHEW) (Entered: 11/22/2019)	
69	01/03/2020	NOTICE of Appearance by KATHERINE HARIHAR on behalf of TVnGO LTD. (BVI) (HARIHAR, KATHERINE) (Entered: 01/03/2020)	
70	01/06/2020	Letter from Liza M. Walsh to the Hon. Renee Marie Bumb, U.S.D.J. re: Markman Hearing. (WALSH, LIZA) (Entered: 01/06/2020)	
71	01/06/2020	ORDER Directing the following terms be given their plain and ordinary meaning; Reserving Decision, etc. Signed by Judge Renee Marie Bumb on 1/6/2020. (rss,) (Entered: 01/06/2020)	
72	01/08/2020	Minute Entry for proceedings held before Judge Renee Marie Bumb: Markman Hearing held on 1/8/2020. Opening statement by Eric Kraeulter, Esquire for defendants. Opening statement by Charles E. Cantine, Esquire for plaintiffs. William Leo Hoarty sworn for defendants. Michael Dominick Spenger sworn for plaintiffs. Ordered suppleental briefing due by 2/3/20 and any reply by 2/10/20. (Court Reporter Ted Formaroli) (ar1,) (Entered: 01/08/2020)	
73	02/03/2020	BRIEF LGE'S OPENING POST MARKMAN HEARING BRIEF (Attachments: # 1 Declaration of Collin W. Park with Ex. P)(WALSH, LIZA) (Entered: 02/03/2020)	
74	02/03/2020	NOTICE of Change of Address by MATTHEW TRAVIS EYET (EYET, MATTHEW) (Entered: 02/03/2020)	
75	02/03/2020	BRIEF TVnGO's OPENING POST MARKMAN HEARING BRIEF (Attachments: # 1 Declaration of Katherine Harihar, # 2 Exhibit 14 - Sprenger Declaration, # 3 Exhibit 15, # 4 Exhibit 16, # 5 Exhibit 17, # 6 Exhibit 18, # 7 Exhibit 19, # 8 Exhibit 20, # 9 Exhibit 21, # 10 Exhibit 22, # 11 Exhibit 23, # 12 Exhibit 24, # 13 Exhibit 25, # 14 Exhibit 26)(EYET, MATTHEW) (Entered: 02/03/2020)	
76	02/04/2020	Notice to be terminated and withdraw from Notices of Electronic filing as to case. Attorney KATHERINE HARIHAR terminated. (HARIHAR, KATHERINE) (Entered: 02/04/2020)	
77	02/10/2020	BRIEF Defendants LG Electronics Inc. and LG Electronics U.S.A., Inc.'s Reply Post Hearing Brief (Attachments: # 1 Declaration of Collin W. Park with Ex. Q-T)(WALSH, LIZA) (Entered: 02/10/2020)	
78	02/10/2020	BRIEF PLAINTIFFS REPLY SUPPLEMENTAL CLAIM CONSTRUCTION BRIEF (EYET, MATTHEW) (Entered: 02/10/2020)	
79	03/06/2020	LETTER ORDER for Additional Briefing. Signed by Judge Renee Marie Bumb on 3/6/2020. (dmr) (Entered: 03/06/2020)	
80	03/20/2020	BRIEF DEFENDANTS LG ELECTRONICS INC. AND LG ELECTRONICS U.S.A., INC.'S ADDITIONAL BRIEF IN RESPONSE TO THE COURT'S MARCH 6, 2020 LETTER ORDER (Attachments: # 1 Declaration of Collin W. Park with Ex. U-V)(WALSH, LIZA) (Entered: 03/20/2020)	
81	04/02/2020	BRIEF IN RESPONSE TO THE COURT'S MARCH 6, 2020 LETTER ORDER (Attachments: # 1 Declaration of Charles E. Cantine, # 2 Exhibit 1, # 3 Exhibit 2)(EYET, MATTHEW) (Entered: 04/02/2020)	
82	04/17/2020	OPINION. Signed by Judge Renee Marie Bumb on 4/16/2020. (dmr) (Entered: 04/17/2020)	
83	04/17/2020	ORDER regarding invalid Patent claims and directing the Clerk to CLOSE THIS FILE. Signed by Judge Renee Marie Bumb on 4/16/2020. (dmr) (Entered: 04/17/2020)	

#	Date	Proceeding Text	Source
	04/17/2020	***Civil Case Terminated. (dmr) (Entered: 04/17/2020)	
84	04/17/2020	Exhibits to 82 Opinion. (Attachments: # 1 Exhibit B, # 2 Exhibit C, # 3 Exhibit D, # 4 Exhibit E)(dmr) (Entered: 04/17/2020)	
85	05/15/2020	NOTICE OF APPEAL as to 83 Order by TVnGO LTD. (BVI). Filing fee $ 505, receipt number ANJDC-10820887. The Clerk's Office hereby certifies the record and the docket sheet available through ECF to be the certified list in lieu of the record and/or the certified copy of the docket entries. Appeal Record due by 5/29/2020. (Attachments: # 1 Appendix, # 2 Appendix)(EYET, MATTHEW) (Entered: 05/15/2020)	
	05/18/2020	Notice of Appeal 85 emailed to the Federal Circuit. (dmr) (Entered: 05/18/2020)	
86	05/26/2020	USCA - Federal Circuit Case Number 2020-1837 for 85 Notice of Appeal (USCA), filed by TVnGO LTD. (BVI). (Document Restricted - Court Only) (Attachments: # 1 Appeal)(js) (Entered: 05/28/2020)	
87	05/28/2020	Transcript of Proceedings held on 1/8/2020, before Judge RENEE MARIE BUMB. Court Reporter/Transcriber Ted Formaroli (609-575-3864). NOTICE REGARDING (1) REDACTION OF PERSONAL IDENTIFIERS IN TRANSCRIPTS AND (2) MOTION TO REDACT AND SEAL: The parties have seven (7) calendar days to file with the Court a Notice of Intent to Request Redaction of this Transcript to comply with Fed.R.Civ.P.5.2(a) (personal identifiers). Parties seeking to redact and seal this Transcript, or portions thereof, pursuant to L.Civ.R. 5.3(g) must e-file a Motion to Redact and Seal utilizing the event `Redact and Seal Transcript/Digital Recording`. Redaction Request to Court Reporter/Transcription Agency due, but not filed, by 6/18/2020. Redacted Transcript Deadline set for 6/29/2020. Release of Transcript Restriction set for 8/26/2020. (tf,) (Entered: 05/28/2020)	
88	06/28/2021	USCA for the Federal Circuit OPINION. (js) (Entered: 06/28/2021)	
89	06/28/2021	USCA JUDGMENT (Affirmed) as to 85 Notice of Appeal (USCA), filed by TVnGO LTD. (BVI) (js) (Entered: 06/28/2021)	
90	08/04/2021	MANDATE of USCA as to 85 Notice of Appeal (USCA), filed by TVnGO LTD. (BVI) (Finance notified) (js) (Entered: 08/04/2021)	
	08/04/2021	Pursuant to Local Rule 79.4, notice is hereby given of the Appellate ruling filed on 8/4/2021. In the event that the mandate or judgment provides for costs or directs a disposition other than an affirmance, the prevailing party shall prepare and submit an order implementing the mandate or judgment. (js) (Entered: 08/04/2021)	

Patents

Number	Title	Issued	Class	Subclass
8,132,220	Method and apparatus for facilitating toggling between internet and TV broadcasts	03/06/2012	725	109
9,124,945	Integrating, at user's premises, TV channel format material with IP format material through overlays	09/01/2015	1	1
9,392,339	TV-Internet integration circuit	07/12/2016	1	1
9,407,969	Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material	08/02/2016	1	1
9,794,621	Method of displaying internet signal on TV	10/17/2017	1	1

Copyright © LexisNexis CourtLink, Inc. All Rights Reserved.
*** THIS DATA IS FOR INFORMATIONAL PURPOSES ONLY ***

Renee Preston

End of Document

Litigation Search Report CRU 3999

Reissue Serial No. 17/867,612

To: Examiner	From: Renee Preston
Location: CRU	Location: CRU 3999 / REM 4C75
Art Unit: 3992	Phone: (571) 272-1607
Date: 07/26/2022	E-mail: renee.preston@uspto.gov

Search Notes

U.S. Patent Number: 9,407,969

1. Performed a KeyCite Search in Westlaw, which retrieves all history on the patent including any litigation.
2. Performed a search on the patent in Lexis CourtLink for any open dockets or closed cases.
3. Performed a search in Lexis in the Federal Courts and Administrative Materials databases for any cases found.
4. Performed a search in Lexis in the IP Journal and Periodicals database for any articles on the patent.
5. Performed a search in Lexis in the news databases for any articles about the patent or any articles about litigation on this patent.

Litigation: Cases Found

Status	Docket	Description
Closed	2:18cv10238	Yvngo Ltd. (Bvi)
Closed	20-1837	TVnGO Ltd. (BVI) v. LG Electronics, Inc.
Closed	1:18cv10238	Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

Paper No. 07/26/2022

Negative Treatment

Negative Direct History

The KeyCited document has been negatively impacted in the following ways by events or decisions in the same litigation or proceedings:

1. FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL [redacted] Out Of Plac

US PAT 9407969 , U.S. PTO Utility , Aug. 02, 2016

Ruled Invalid by

2. TVnGO Ltd. (BVI) v. LG Electronics Inc. [redacted]

861 Fed.Appx. 453 , Fed.Cir. , June 28, 2021

WESTLAW © 2022 Thomson Reuters. No claim to original U.S. Government Works.

861 Fed.Appx. 453
This case was not selected for
publication in West's Federal Reporter.
See Fed. Rule of Appellate Procedure 32.1 generally
governing citation of judicial decisions issued on or after
Jan. 1, 2007. See also U.S.Ct. of App. Fed. Cir. Rule 32.1.
United States Court of Appeals, Federal Circuit.

TVNGO LTD. (BVI), Plaintiff-Appellant

v.

LG ELECTRONICS INC., LG Electronics USA, Inc., Defendants-Appellees

2020-1837
|
Decided: June 28, 2021

Synopsis

Background: Holder of patents which claimed methods and devices that made televisions "smart," meaning able to display both television content and internet streaming content, brought action against alleged infringers. The United States District Court for the District of New Jersey, Renée Marie Bumb, J., 2020 WL 1899781, issued a claim-construction opinion concluding that two claim phrases rendered the asserted claims indefinite. Patent holder appealed.

Holdings: The Court of Appeals, Prost, Circuit Judge, held that:

[1] intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," rendered the patent claims invalid for indefiniteness, and

[2] intra-patent inconsistencies between the independent and dependent claims rendered the patent claims invalid for indefiniteness.

Affirmed.

West Headnotes (3)

[1] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," in patents for "smart" televisions, rendered the patent claims invalid for indefiniteness; neither phrase had an ordinary meaning in the art, and while the specification used these words to describe activating an already overlaid icon to display the internet protocol (IP) content it represented, the claims appeared to use the disputed phrases with respect to displaying an overlay in the first place, thereby creating confusion as to which reading was correct. 35 U.S.C.A. § 112 (2005).

[2] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the independent and dependent claims, in patents for "smart" televisions, regarding whether an "overlay activation criterion" came from the internet or from a user's premises rendered the patent claims invalid for indefiniteness; while the independent claims indicated that an "overlay activation criterion" was a type of "overlay-enabling digital data" that was provided over the internet and transmitted to the user's premises, the dependent claims stated that "overlay activation criterion" included a user command information, indicating that an "overlay activation criterion" could come from a user's premises via the remote control. 35 U.S.C.A. § 112 (2005).

1 Cases that cite this headnote

[3] **Patents** ⇐ In general; utility

US Patent 8,132,220, US Patent 9,124,945, US Patent 9,392,339, US Patent 9,407,969, US Patent 9,794,621. Invalid.

***454** Appeal from the United States District Court for the District of New Jersey in No. 1:18-cv-10238-RMB-KMW, Judge Renee Marie Bumb.

Attorneys and Law Firms

Charles Cantine, Dunlap Bennett & Ludwig PLLC, New York, NY, argued for plaintiff-appellant.

William R. Peterson, Morgan, Lewis & Bockius LLP, Houston, TX, argued for defendants-appellees. Also represented by Natalie A. Bennett, Washington, DC; Eric Kraeutler, Philadelphia, PA; Jeremy Deane Peterson, PV Law LLP, Washington, DC.

Before Prost*, Schall, and Reyna, Circuit Judges.

Opinion

Prost, Circuit Judge.

TVnGO Ltd. (BVI) ("TVnGO") appeals a final patentinvalidity judgment by the U.S. District Court for the District of New Jersey. We agree that the patent claims TVnGO asserts against LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, "LGE") are indefinite under 35 U.S.C. § 112, paragraph 2.[1] We therefore affirm.

Background

I

TVnGO owns U.S. Patent Nos. 8,132,220 ("the '220 patent"), 9,124,945 ("the '945 patent"), 9,392,339 ("the '339 patent"), 9,407,969 ("the '969 patent"), and 9,794,621 ("the '621 patent"), which share a specification and drawings.[2] The patents relate to providing "a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site." '220 patent col. 2 ll. 20–22. Figure 1, for example, depicts a "TV-Internet Integration Box" with inputs from a cable box and the internet, and an output to a television:

***455**

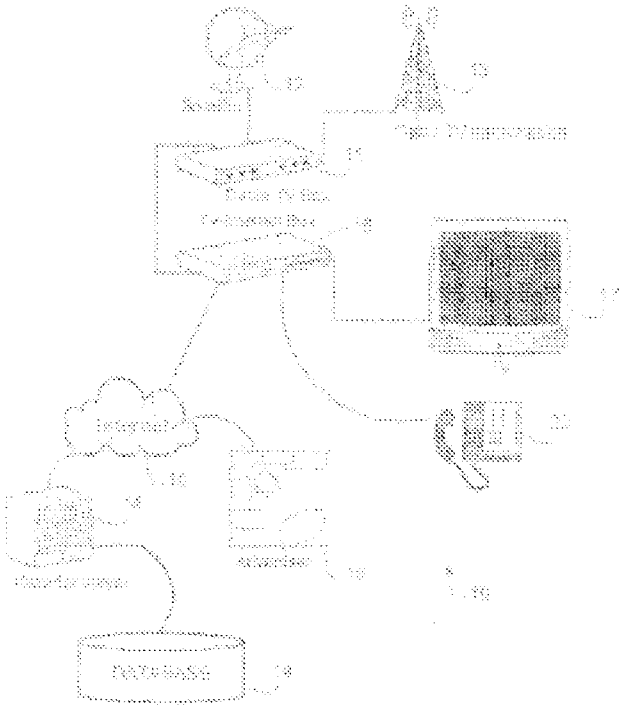
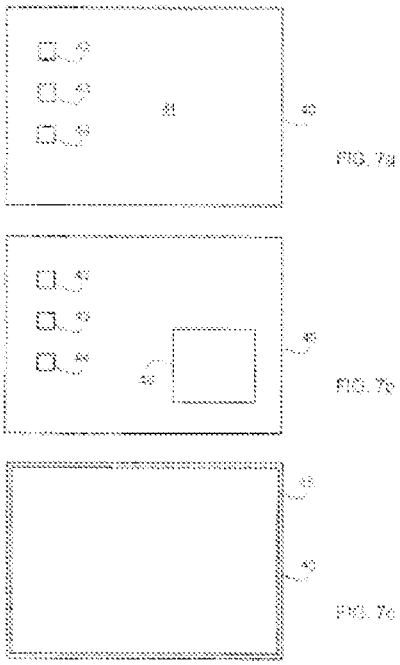


FIG. 1

Id. at Fig. 1.

This system can be influenced in various ways. An advertiser may specify conditions for displaying advertisements, *id.* at col. 3 ll. 59–66, an IP-content provider may store "calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises," *id.* at col. 4 ll. 9–13, and a subscriber may select "what kind of IP content" he or she "wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed," *id.* at col. 4 ll. 21–24. The specification further describes a remote control, *id.* at col. 7 ll. 7–50, that can be programmed according to the embodiment of Figures 7a–c:

***456**



Id. at Fig. 7a–c.

Figure 7a "shows the default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40," as well as "IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site of known address." *Id.* at col. 7 ll. 29–35. In TVnGO's view, an icon "could take the form of a commonly recognized logo, such as the Netflix logo." *TVnGO Ltd. (BVI) v. LG Elecs., Inc.*, 2020 WL 1899781, at *1 n.3 (D.N.J. Apr. 17, 2020). Figure 7b shows that, upon "pressing the key on the remote control unit 30 that corresponds to the icon 42, the IP content corresponding thereto is displayed within a small window 45." '220 patent col. 7 ll. 35–37. At this point, "[t]he icons 42, 43 and 44 remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit 30." *Id.* at col. 7 ll. 39–42. "On pressing a key a second time in succession, the IP content is re-sized so that its window 45 occupies substantially the whole area of the screen," as shown in Figure 7c. *Id.* at col. 7 ll. 42–44. "On pressing the key a third time in succession, the situation reverts to the default." *Id.* at col. 7 ll. 44–46. "Thus, each key operates as a three-way toggle that switches between three different display modes." *Id.* at col. 7 ll. 48–50.

II

TVnGO alleges that LGE's "Smart TVs" infringe the asserted patents, which it describes as generally directed to "methods and devices that make televisions 'smart.' " J.A. 103–04 (Complaint). After a *Markman* hearing, pre-and post-hearing briefing, and supplemental briefing, the district court issued a claim-construction opinion concluding that the two claim phrases at issue here render the asserted claims indefinite under § 112, paragraph 2. *TVnGO*, 2020 WL 1899781, at *7. In the district court's view, these phrases present "irreconcilable inconsistencies" within and across the asserted patents ("intra-" and "inter-patent" inconsistencies, respectively). *Id.* at *3. "Try as it might," the district court could not "construe the claims with any confidence." *Id.* at *4. Accordingly, the court ***457** held the asserted claims invalid. J.A. 18.[3] TVnGO appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

Discussion

"[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909, 134 S.Ct. 2120, 189 L.Ed.2d 37 (2014) (cleaned up). Accordingly, "[t]he Patent Act requires that a patent specification 'conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as [the] invention.' " *Id.* at 901, 134 S.Ct. 2120 (second alteration in original) (quoting 35 U.S.C. § 112, para. 2). Patent claims are indefinite if they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.*

"In the face of an allegation of indefiniteness, general principles of claim construction apply." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010)). The words of a claim "are generally given their ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). "[C]laims are to be read in light of the patent's specification and prosecution history." *Nautilus*, 572 U.S. at 908, 134 S.Ct. 2120.

Whether a claim is indefinite under 35 U.S.C. § 112 is ultimately a legal conclusion that we review de novo. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1228 (Fed. Cir. 2016). "Any fact critical to a holding on indefiniteness ... must be proven by the challenger by clear

Samsung
Ex. 1031 - Page 84

and convincing evidence." *Id.* (alteration in original) (quoting *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003)). "If indefiniteness can be determined based solely on intrinsic evidence, our review is de novo." *Id.* Here, the district court relied on "a review of the claim terms, the specifications, and the prosecution histories" and declined to rely on TVnGO's expert testimony because it had "no support" in the patents. *TVnGO*, 2020 WL 1899781, at *6–7. Therefore, our review is de novo.

Two phrases are at issue here: "overlay activation criterion" and "overlay activation signal."[4] In the claims, these phrases relate generally to producing overlays (e.g., in Figures 7a–c above). *TVnGO*, 2020 WL 1899781, at *1. But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district court. Before addressing those inconsistencies, however, we first highlight the lack of intrinsic evidence in this case as to the meanings of these phrases.

For starters, the parties agree that neither "overlay activation criterion" nor "overlay activation signal" has an ordinary meaning in the art. Appellees' Br. 15; Reply Br. 13; *see TVnGO*, 2020 WL 1899781, at *3 & n.8. Instead, TVnGO contends that a skilled artisan would understand the disputed ***458** phrases by stitching together their constituent words.[5] Reply Br. 2 ("[T]he terms – "overlay," "activation," "criterion," and "signal" – are each easily understood, plain English words."); Oral Arg. at 2:24–46 (arguing that "overlay has a meaning, criterion has a meaning, signal has a meaning, activation has a meaning").[6] Here, we are unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean.

The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification, as both were added to the claims during prosecution. And the "limited information" provided by the prosecution history isn't enough to provide reasonable certainty here either. *TVnGO*, 2020 WL 1899781, at *6. Like the district court, we are unconvinced that the disputed phrases "are far from indefinite" merely because they were "added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed." Appellant's Br. 10; *see Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1380 (Fed. Cir. 2017). This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below as to the '339, '945, and '621 patents (discussed in Section I), and the '220 and '969 patents (discussed in Section II).

I

[1] We turn now to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '339, '934, and '621 patents: an inconsistency between the specification and the claims as to the result achieved by an "overlay activation criterion" or "overlay activation signal." Specifically, beyond its failure to mention the disputed phrases, the specification's use of the words "activates" and "activating" injects further uncertainty. While the specification uses these words to describe activating an already overlaid icon to display the IP content it represents, the claims appear to use the disputed phrases with respect to displaying an overlay in the first place—creating confusion as to which reading is correct. On the one hand, the specification states that "pressing on a specific key *activates* the displayed icon," '220 patent col. 7 ll. 19–22 (emphasis added), and references "the appropriate keys or button for *activating* each icon," *id.* at col. 7 ll. 24–25 (emphasis added). The claims, however, point in a different direction. With respect to the "criterion" term, '339 patent claims 1 and 15 recite "respond[ing] to an overlay activation criterion to cause the display screen to display the overlays." With respect to the "signal" term, '945 patent claims 1 and 12 state that the result of processing the "overlay activation signal" is "generating display drive signals causing the TV screen to display the overlays," and '621 patent claim 1 recites "generating display drive signals that cause the TV screen to display the one or more overlays."

TVnGO responds that the disputed terms cover both displaying an initial overlay and displaying IP material. *E.g.*, Reply Br. 26. But we are not persuaded that this suggestion clears up the uncertainty, as it could also be the case that one or the other of these options is right. Even if it may be possible to "ascribe some meaning" to the disputed limitation, as TVnGO's ***459** reading attempts, more is required: one of ordinary skill must have reasonable certainty. *Nautilus*, 572 U.S. at 911, 134 S.Ct. 2120. Here, a person of ordinary skill would encounter two claim phrases without an ordinary meaning in the art. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1345 (Fed. Cir. 2015) (indefinite term had no "plain meaning to one of skill in the art"). Upon consulting the specification, he or she would not find those phrases. *See id.* at 1344 (indefinite term not defined in specification);

Infinity Comput. Prods., Inc. v. Oki Data Ams., Inc., 987 F.3d 1053, 1056 (Fed. Cir. 2021) (indefinite term absent from specification). And when attempting to glean their meaning from the patent's use of "activates" and "activating," he or she would find that "the patents teach two different results"—i.e., display of IP content associated with an already displayed overlay versus display of an overlay in the first place—without reasonable certainty as to which reading is correct. *TVnGO*, 2020 WL 1899781, at *3. The asserted '339, '945, and '621 patent claims are therefore indefinite.

II

[2] We turn next to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '220 and '969 patents. This is an inconsistency between the independent and dependent claims regarding whether an "overlay activation criterion" comes from the internet or from a user's premises. On the one hand, the independent claims indicate that an "overlay activation criterion" is a type of "overlay-enabling digital data" that is provided "over the Internet" and "transmitted to the user's premises." '220 patent claims 1, 13; '969 patent claims 1, 13. But the dependent claims, on the other hand, state that "said overlay activation criterion includes ... a user command information," indicating that an "overlay activation criterion" can come from a user's premises via the remote control. '220 patent claims 9, 20; '969 patent claims 9, 20. As the district court explained, "the intrinsic evidence presents ... irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet—i.e., from the user's premises." *TVnGO*, 2020 WL 1899781, at *3.

For its part, TVnGO asserts that an overlay activation criterion "comes from the Internet," Reply Br. 3, arguing that, although " 'user commands' ... come from a user, not the Internet," "user command *information*" comes from the internet. Appellant's Br. 20; *see also* Reply Br. 19 ("There is no dispute that a 'user command' comes from a user."). This distinction lacks intrinsic support. Rather, the specification uses the word "command" only once, and in relation to the infrared (IR) remote control. '220 patent col. 7 ll. 2–3 ("An IR receiver 28 is adapted to receive IR commands from a remote control unit."). And when other dependent claims use "command," they similarly recite "receiving a command from a user at said user premises." *Id.* at claims 3, 15; '969 patent claims 3, 15. Accordingly, one of ordinary skill would lack reasonable certainty as to the source of an "overlay activation criterion"—whether the internet or a user's premises.

TVnGO argues in the alternative that this alleged inconsistency is better characterized as an allegation that the dependent claims are invalid for sweeping more broadly than the independent claims. *See* 35 U.S.C. § 112, para. 4. TVnGO misses the mark. The issue is not breadth of the dependent claims but their use of the disputed phrase in a way that contradicts the independent claims. The dependent claims ***460** state that "*said overlay activation criterion* includes ... a user command information," which conflicts with the independent claim's use of this same phrase. '220 patent claims 9, 20 (emphasis added); '969 patent claims 9, 20 (same). That prevents reasonable certainty.

Further, merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in "[o]ther claims of the patent in question," which "can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that. The asserted '220 and '969 patent claims are therefore indefinite.

Conclusion

The district court also relied on inter-patent inconsistencies. *TVnGO*, 2020 WL 1899781, at *4–6. We find it unnecessary to reach those, as the intra-patent grounds discussed above are sufficient to establish indefiniteness. We have considered TVnGO's remaining arguments and find them unpersuasive. The district court correctly concluded that the asserted claims are invalid for indefiniteness. We affirm.

AFFIRMED

All Citations

861 Fed.Appx. 453

Samsung
Ex. 1031 - Page 86

Footnotes

* Circuit Judge Sharon Prost vacated the position of Chief Judge on May 21, 2021.

1 The America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284, effective September 16, 2012, designated § 112, paragraph 2 as § 112(b). These patents stem from an application filed in 2005, so we refer to pre-AIA § 112.

2 For simplicity, all citations to the shared specification are to the '220 patent.

3 The claims are: '220 patent claims 1, 9–10, 13, 17, and 20; '945 patent claims 1, 4, 8, 9, 12, 15, 19, and 21; '696 patent claims 1, 9–10, 13, 17, and 20; '339 patent claims 1, 4–7, 12–15, and 18; and '621 patent claims 1, 4, 9, and 11.

4 The district court's analysis as to "overlay activation signal" applied equally to the phrase "special overlay activation signal" appearing in the '945 and '621 patents. *TVnGO*, 2020 WL 1899781, at *2 n.4.

5 At the district court, TVnGO contended that no construction was necessary and in the alternative proposed constructions which, LGE notes, expanded in response to the inconsistencies LGE raised. *See* Appellees' Br. 23–28.

6 No. 20-1837, http://www.cafc.uscourts.gov/oral-argument-recordings.

End of Document

© 2022 Thomson Reuters. No claim to original U.S. Government Works.

861 Fed.Appx. 453
This case was not selected for
publication in West's Federal Reporter.
See Fed. Rule of Appellate Procedure 32.1 generally
governing citation of judicial decisions issued on or after
Jan. 1, 2007. See also U.S.Ct. of App. Fed. Cir. Rule 32.1.
United States Court of Appeals, Federal Circuit.

TVNGO LTD. (BVI), Plaintiff-Appellant

v.

LG ELECTRONICS INC., LG Electronics USA, Inc., Defendants-Appellees

2020-1837
|
Decided: June 28, 2021

Synopsis

Background: Holder of patents which claimed methods and devices that made televisions "smart," meaning able to display both television content and internet streaming content, brought action against alleged infringers. The United States District Court for the District of New Jersey, Renée Marie Bumb, J., 2020 WL 1899781, issued a claim-construction opinion concluding that two claim phrases rendered the asserted claims indefinite. Patent holder appealed.

Holdings: The Court of Appeals, Prost, Circuit Judge, held that:

[1] intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," rendered the patent claims invalid for indefiniteness, and

[2] intra-patent inconsistencies between the independent and dependent claims rendered the patent claims invalid for indefiniteness.

Affirmed.

West Headnotes (3)

[1] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," in patents for "smart" televisions, rendered the patent claims invalid for indefiniteness; neither phrase had an ordinary meaning in the art, and while the specification used these words to describe activating an already overlaid icon to display the internet protocol (IP) content it represented, the claims appeared to use the disputed phrases with respect to displaying an overlay in the first place, thereby creating confusion as to which reading was correct. 35 U.S.C.A. § 112 (2005).

[2] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the independent and dependent claims, in patents for "smart" televisions, regarding whether an "overlay activation criterion" came from the internet or from a user's premises rendered the patent claims invalid for indefiniteness; while the independent claims indicated that an "overlay activation criterion" was a type of "overlay-enabling digital data" that was provided over the internet and transmitted to the user's premises, the dependent claims stated that "overlay activation criterion" included a user command information, indicating that an "overlay activation criterion" could come from a user's premises via the remote control. 35 U.S.C.A. § 112 (2005).

1 Cases that cite this headnote

[3] **Patents** ⇐ In general; utility

US Patent 8,132,220, US Patent 9,124,945, US Patent 9,392,339, US Patent 9,407,969, US Patent 9,794,621. Invalid.

***454** Appeal from the United States District Court for the District of New Jersey in No. 1:18-cv-10238-RMB-KMW, Judge Renee Marie Bumb.

Attorneys and Law Firms

Charles Cantine, Dunlap Bennett & Ludwig PLLC, New York, NY, argued for plaintiff-appellant.

William R. Peterson, Morgan, Lewis & Bockius LLP, Houston, TX, argued for defendants-appellees. Also represented by Natalie A. Bennett, Washington, DC; Eric Kraeutler, Philadelphia, PA; Jeremy Deane Peterson, PV Law LLP, Washington, DC.

Before Prost[*], Schall, and Reyna, Circuit Judges.

Opinion

Prost, Circuit Judge.

TVnGO Ltd. (BVI) ("TVnGO") appeals a final patentinvalidity judgment by the U.S. District Court for the District of New Jersey. We agree that the patent claims TVnGO asserts against LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, "LGE") are indefinite under 35 U.S.C. § 112, paragraph 2.[1] We therefore affirm.

Background

I

TVnGO owns U.S. Patent Nos. 8,132,220 ("the '220 patent"), 9,124,945 ("the '945 patent"), 9,392,339 ("the '339 patent"), 9,407,969 ("the '969 patent"), and 9,794,621 ("the '621 patent"), which share a specification and drawings.[2] The patents relate to providing "a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site." '220 patent col. 2 ll. 20–22. Figure 1, for example, depicts a "TV-Internet Integration Box" with inputs from a cable box and the internet, and an output to a television:

***455**

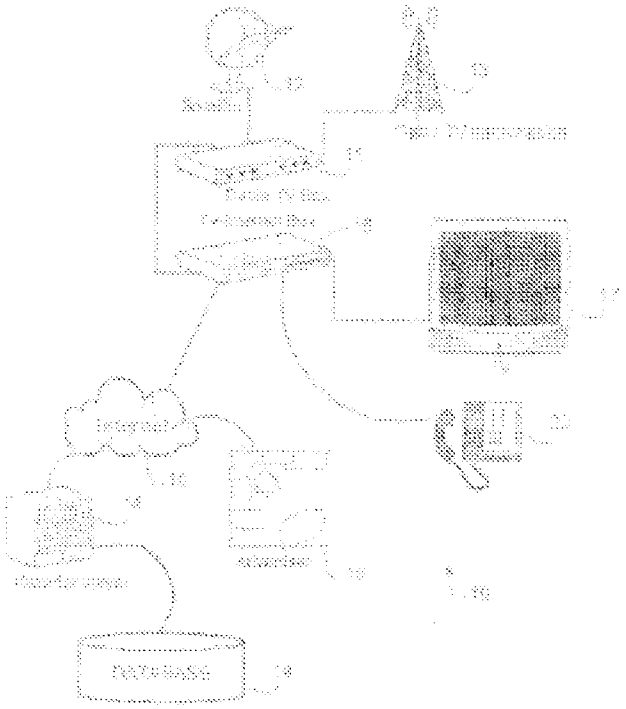


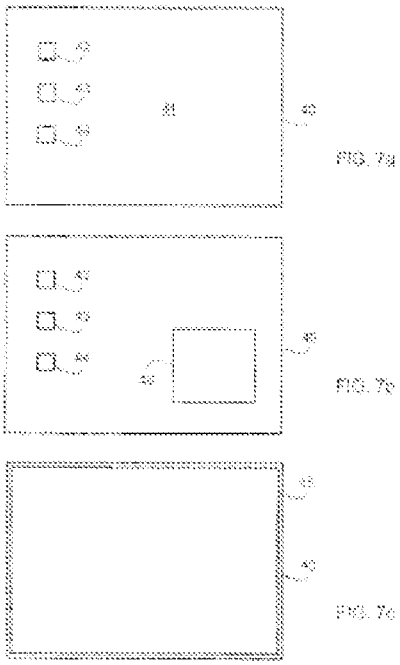
FIG. 1

Id. at Fig. 1.

This system can be influenced in various ways. An advertiser may specify conditions for displaying advertisements, *id.* at col. 3 ll. 59–66, an IP-content provider may store "calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises," *id.* at col. 4 ll. 9–13, and a subscriber may select "what kind of IP content" he or she "wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed," *id.* at col. 4 ll. 21–24. The specification further describes a remote control, *id.* at col. 7 ll. 7–50, that can be programmed according to the embodiment of Figures 7a–c:

***456**

Samsung
Ex. 1031 - Page 89



Id. at Fig. 7a–c.

Figure 7a "shows the default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40," as well as "IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site of known address." *Id.* at col. 7 ll. 29–35. In TVnGO's view, an icon "could take the form of a commonly recognized logo, such as the Netflix logo." *TVnGO Ltd. (BVI) v. LG Elecs., Inc.*, 2020 WL 1899781, at *1 n.3 (D.N.J. Apr. 17, 2020). Figure 7b shows that, upon "pressing the key on the remote control unit 30 that corresponds to the icon 42, the IP content corresponding thereto is displayed within a small window 45." '220 patent col. 7 ll. 35–37. At this point, "[t]he icons 42, 43 and 44 remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit 30." *Id.* at col. 7 ll. 39–42. "On pressing a key a second time in succession, the IP content is re-sized so that its window 45 occupies substantially the whole area of the screen," as shown in Figure 7c. *Id.* at col. 7 ll. 42–44. "On pressing the key a third time in succession, the situation reverts to the default." *Id.* at col. 7 ll. 44–46. "Thus, each key operates as a three-way toggle that switches between three different display modes." *Id.* at col. 7 ll. 48–50.

II

TVnGO alleges that LGE's "Smart TVs" infringe the asserted patents, which it describes as generally directed to "methods and devices that make televisions 'smart.' " J.A. 103–04 (Complaint). After a *Markman* hearing, pre-and post-hearing briefing, and supplemental briefing, the district court issued a claim-construction opinion concluding that the two claim phrases at issue here render the asserted claims indefinite under § 112, paragraph 2. *TVnGO*, 2020 WL 1899781, at *7. In the district court's view, these phrases present "irreconcilable inconsistencies" within and across the asserted patents ("intra-" and "inter-patent" inconsistencies, respectively). *Id.* at *3. "Try as it might," the district court could not "construe the claims with any confidence." *Id.* at *4. Accordingly, the court ***457** held the asserted claims invalid. J.A. 18.[3] TVnGO appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

Discussion

"[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909, 134 S.Ct. 2120, 189 L.Ed.2d 37 (2014) (cleaned up). Accordingly, "[t]he Patent Act requires that a patent specification 'conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as [the] invention.' " *Id.* at 901, 134 S.Ct. 2120 (second alteration in original) (quoting 35 U.S.C. § 112, para. 2). Patent claims are indefinite if they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.*

"In the face of an allegation of indefiniteness, general principles of claim construction apply." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010)). The words of a claim "are generally given their ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). "[C]laims are to be read in light of the patent's specification and prosecution history." *Nautilus*, 572 U.S. at 908, 134 S.Ct. 2120.

Whether a claim is indefinite under 35 U.S.C. § 112 is ultimately a legal conclusion that we review de novo. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1228 (Fed. Cir. 2016). "Any fact critical to a holding on indefiniteness ... must be proven by the challenger by clear

and convincing evidence." *Id.* (alteration in original) (quoting *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003)). "If indefiniteness can be determined based solely on intrinsic evidence, our review is de novo." *Id.* Here, the district court relied on "a review of the claim terms, the specifications, and the prosecution histories" and declined to rely on TVnGO's expert testimony because it had "no support" in the patents. *TVnGO*, 2020 WL 1899781, at *6–7. Therefore, our review is de novo.

Two phrases are at issue here: "overlay activation criterion" and "overlay activation signal."[4] In the claims, these phrases relate generally to producing overlays (e.g., in Figures 7a–c above). *TVnGO*, 2020 WL 1899781, at *1. But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district court. Before addressing those inconsistencies, however, we first highlight the lack of intrinsic evidence in this case as to the meanings of these phrases.

For starters, the parties agree that neither "overlay activation criterion" nor "overlay activation signal" has an ordinary meaning in the art. Appellees' Br. 15; Reply Br. 13; *see TVnGO*, 2020 WL 1899781, at *3 & n.8. Instead, TVnGO contends that a skilled artisan would understand the disputed ***458** phrases by stitching together their constituent words.[5] Reply Br. 2 ("[T]he terms – "overlay," "activation," "criterion," and "signal" – are each easily understood, plain English words."); Oral Arg. at 2:24–46 (arguing that "overlay has a meaning, criterion has a meaning, signal has a meaning, activation has a meaning").[6] Here, we are unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean.

The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification, as both were added to the claims during prosecution. And the "limited information" provided by the prosecution history isn't enough to provide reasonable certainty here either. *TVnGO*, 2020 WL 1899781, at *6. Like the district court, we are unconvinced that the disputed phrases "are far from indefinite" merely because they were "added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed." Appellant's Br. 10; *see Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1380 (Fed. Cir. 2017). This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below as to the '339, '945, and '621 patents (discussed in Section I), and the '220 and '969 patents (discussed in Section II).

I

[1] We turn now to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '339, '934, and '621 patents: an inconsistency between the specification and the claims as to the result achieved by an "overlay activation criterion" or "overlay activation signal." Specifically, beyond its failure to mention the disputed phrases, the specification's use of the words "activates" and "activating" injects further uncertainty. While the specification uses these words to describe activating an already overlaid icon to display the IP content it represents, the claims appear to use the disputed phrases with respect to displaying an overlay in the first place—creating confusion as to which reading is correct. On the one hand, the specification states that "pressing on a specific key *activates* the displayed icon," '220 patent col. 7 ll. 19–22 (emphasis added), and references "the appropriate keys or button for *activating* each icon," *id.* at col. 7 ll. 24–25 (emphasis added). The claims, however, point in a different direction. With respect to the "criterion" term, '339 patent claims 1 and 15 recite "respond[ing] to an overlay activation criterion to cause the display screen to display the overlays." With respect to the "signal" term, '945 patent claims 1 and 12 state that the result of processing the "overlay activation signal" is "generating display drive signals causing the TV screen to display the overlays," and '621 patent claim 1 recites "generating display drive signals that cause the TV screen to display the one or more overlays."

TVnGO responds that the disputed terms cover both displaying an initial overlay and displaying IP material. *E.g.*, Reply Br. 26. But we are not persuaded that this suggestion clears up the uncertainty, as it could also be the case that one or the other of these options is right. Even if it may be possible to "ascribe some meaning" to the disputed limitation, as TVnGO's ***459** reading attempts, more is required: one of ordinary skill must have reasonable certainty. *Nautilus*, 572 U.S. at 911, 134 S.Ct. 2120. Here, a person of ordinary skill would encounter two claim phrases without an ordinary meaning in the art. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1345 (Fed. Cir. 2015) (indefinite term had no "plain meaning to one of skill in the art"). Upon consulting the specification, he or she would not find those phrases. *See id.* at 1344 (indefinite term not defined in specification);

Samsung
Ex. 1031 - Page 91

Infinity Comput. Prods., Inc. v. Oki Data Ams., Inc., 987 F.3d 1053, 1056 (Fed. Cir. 2021) (indefinite term absent from specification). And when attempting to glean their meaning from the patent's use of "activates" and "activating," he or she would find that "the patents teach two different results"—i.e., display of IP content associated with an already displayed overlay versus display of an overlay in the first place—without reasonable certainty as to which reading is correct. *TVnGO*, 2020 WL 1899781, at *3. The asserted '339, '945, and '621 patent claims are therefore indefinite.

II

[2] We turn next to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '220 and '969 patents. This is an inconsistency between the independent and dependent claims regarding whether an "overlay activation criterion" comes from the internet or from a user's premises. On the one hand, the independent claims indicate that an "overlay activation criterion" is a type of "overlay-enabling digital data" that is provided "over the Internet" and "transmitted to the user's premises." '220 patent claims 1, 13; '969 patent claims 1, 13. But the dependent claims, on the other hand, state that "said overlay activation criterion includes ... a user command information," indicating that an "overlay activation criterion" can come from a user's premises via the remote control. '220 patent claims 9, 20; '969 patent claims 9, 20. As the district court explained, "the intrinsic evidence presents ... irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet—i.e., from the user's premises." *TVnGO*, 2020 WL 1899781, at *3.

For its part, TVnGO asserts that an overlay activation criterion "comes from the Internet," Reply Br. 3, arguing that, although " 'user commands' ... come from a user, not the Internet," "user command *information*" comes from the internet. Appellant's Br. 20; *see also* Reply Br. 19 ("There is no dispute that a 'user command' comes from a user."). This distinction lacks intrinsic support. Rather, the specification uses the word "command" only once, and in relation to the infrared (IR) remote control. '220 patent col. 7 ll. 2–3 ("An IR receiver 28 is adapted to receive IR commands from a remote control unit."). And when other dependent claims use "command," they similarly recite "receiving a command from a user at said user premises." *Id.* at claims 3, 15; '969 patent claims 3, 15. Accordingly, one of ordinary skill would lack reasonable certainty as to the source of an "overlay activation criterion"—whether the internet or a user's premises.

TVnGO argues in the alternative that this alleged inconsistency is better characterized as an allegation that the dependent claims are invalid for sweeping more broadly than the independent claims. *See* 35 U.S.C. § 112, para. 4. TVnGO misses the mark. The issue is not breadth of the dependent claims but their use of the disputed phrase in a way that contradicts the independent claims. The dependent claims ***460** state that "*said overlay activation criterion* includes ... a user command information," which conflicts with the independent claim's use of this same phrase. '220 patent claims 9, 20 (emphasis added); '969 patent claims 9, 20 (same). That prevents reasonable certainty.

Further, merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in "[o]ther claims of the patent in question," which "can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that. The asserted '220 and '969 patent claims are therefore indefinite.

Conclusion

The district court also relied on inter-patent inconsistencies. *TVnGO*, 2020 WL 1899781, at *4–6. We find it unnecessary to reach those, as the intra-patent grounds discussed above are sufficient to establish indefiniteness. We have considered TVnGO's remaining arguments and find them unpersuasive. The district court correctly concluded that the asserted claims are invalid for indefiniteness. We affirm.

AFFIRMED

All Citations

861 Fed.Appx. 453

Samsung
Ex. 1031 - Page 92

Footnotes

* Circuit Judge Sharon Prost vacated the position of Chief Judge on May 21, 2021.

1 The America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284, effective September 16, 2012, designated § 112, paragraph 2 as § 112(b). These patents stem from an application filed in 2005, so we refer to pre-AIA § 112.

2 For simplicity, all citations to the shared specification are to the '220 patent.

3 The claims are: '220 patent claims 1, 9–10, 13, 17, and 20; '945 patent claims 1, 4, 8, 9, 12, 15, 19, and 21; '696 patent claims 1, 9–10, 13, 17, and 20; '339 patent claims 1, 4–7, 12–15, and 18; and '621 patent claims 1, 4, 9, and 11.

4 The district court's analysis as to "overlay activation signal" applied equally to the phrase "special overlay activation signal" appearing in the '945 and '621 patents. *TVnGO*, 2020 WL 1899781, at *2 n.4.

5 At the district court, TVnGO contended that no construction was necessary and in the alternative proposed constructions which, LGE notes, expanded in response to the inconsistencies LGE raised. *See* Appellees' Br. 23–28.

6 No. 20-1837, http://www.cafc.uscourts.gov/oral-argument-recordings.

End of Document

© 2022 Thomson Reuters. No claim to original U.S. Government Works.

861 Fed.Appx. 453
This case was not selected for
publication in West's Federal Reporter.
See Fed. Rule of Appellate Procedure 32.1 generally
governing citation of judicial decisions issued on or after
Jan. 1, 2007. See also U.S.Ct. of App. Fed. Cir. Rule 32.1.
United States Court of Appeals, Federal Circuit.

TVNGO LTD. (BVI), Plaintiff-Appellant

v.

LG ELECTRONICS INC., LG Electronics USA, Inc., Defendants-Appellees

2020-1837
|
Decided: June 28, 2021

Synopsis

Background: Holder of patents which claimed methods and devices that made televisions "smart," meaning able to display both television content and internet streaming content, brought action against alleged infringers. The United States District Court for the District of New Jersey, Renée Marie Bumb, J., 2020 WL 1899781, issued a claim-construction opinion concluding that two claim phrases rendered the asserted claims indefinite. Patent holder appealed.

Holdings: The Court of Appeals, Prost, Circuit Judge, held that:

[1] intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," rendered the patent claims invalid for indefiniteness, and

[2] intra-patent inconsistencies between the independent and dependent claims rendered the patent claims invalid for indefiniteness.

Affirmed.

West Headnotes (3)

[1] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," in patents for "smart" televisions, rendered the patent claims invalid for indefiniteness; neither phrase had an ordinary meaning in the art, and while the specification used these words to describe activating an already overlaid icon to display the internet protocol (IP) content it represented, the claims appeared to use the disputed phrases with respect to displaying an overlay in the first place, thereby creating confusion as to which reading was correct. 35 U.S.C.A. § 112 (2005).

[2] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the independent and dependent claims, in patents for "smart" televisions, regarding whether an "overlay activation criterion" came from the internet or from a user's premises rendered the patent claims invalid for indefiniteness; while the independent claims indicated that an "overlay activation criterion" was a type of "overlay-enabling digital data" that was provided over the internet and transmitted to the user's premises, the dependent claims stated that "overlay activation criterion" included a user command information, indicating that an "overlay activation criterion" could come from a user's premises via the remote control. 35 U.S.C.A. § 112 (2005).

1 Cases that cite this headnote

[3] **Patents** ⇐ In general; utility

US Patent 8,132,220, US Patent 9,124,945, US Patent 9,392,339, US Patent 9,407,969, US Patent 9,794,621. Invalid.

***454** Appeal from the United States District Court for the District of New Jersey in No. 1:18-cv-10238-RMB-KMW, Judge Renee Marie Bumb.

Attorneys and Law Firms

Charles Cantine, Dunlap Bennett & Ludwig PLLC, New York, NY, argued for plaintiff-appellant.

William R. Peterson, Morgan, Lewis & Bockius LLP, Houston, TX, argued for defendants-appellees. Also represented by Natalie A. Bennett, Washington, DC; Eric Kraeutler, Philadelphia, PA; Jeremy Deane Peterson, PV Law LLP, Washington, DC.

Before Prost[*], Schall, and Reyna, Circuit Judges.

Opinion

Prost, Circuit Judge.

TVnGO Ltd. (BVI) ("TVnGO") appeals a final patentinvalidity judgment by the U.S. District Court for the District of New Jersey. We agree that the patent claims TVnGO asserts against LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, "LGE") are indefinite under 35 U.S.C. § 112, paragraph 2.[1] We therefore affirm.

Background

I

TVnGO owns U.S. Patent Nos. 8,132,220 ("the '220 patent"), 9,124,945 ("the '945 patent"), 9,392,339 ("the '339 patent"), 9,407,969 ("the '969 patent"), and 9,794,621 ("the '621 patent"), which share a specification and drawings.[2] The patents relate to providing "a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site." '220 patent col. 2 ll. 20–22. Figure 1, for example, depicts a "TV-Internet Integration Box" with inputs from a cable box and the internet, and an output to a television:

***455**

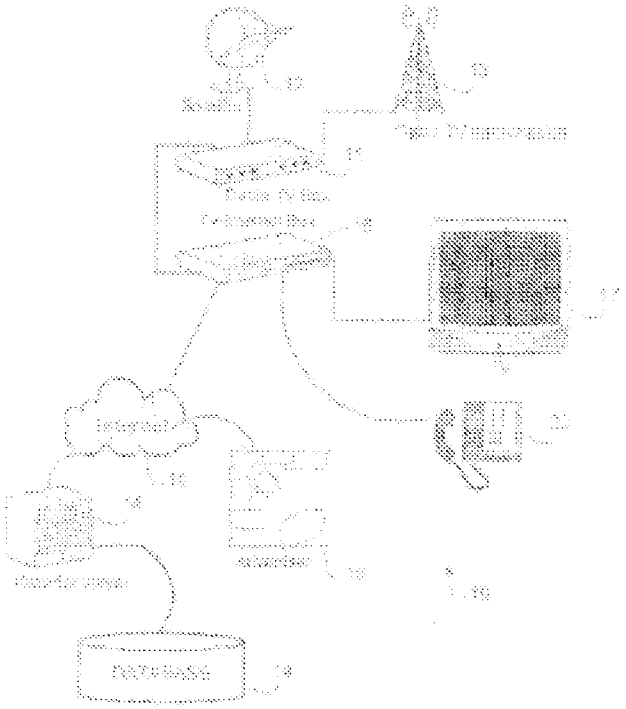
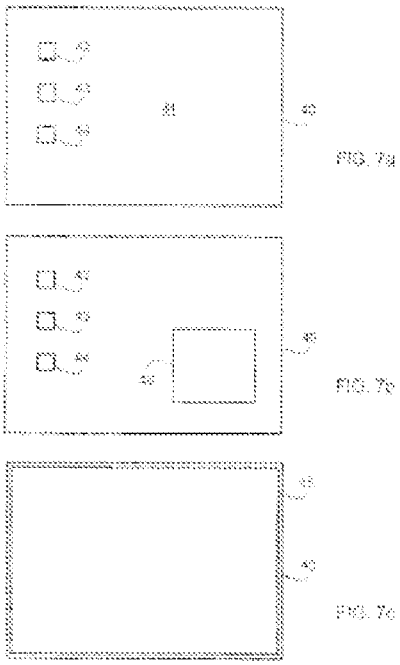


FIG. 1

Id. at Fig. 1.

This system can be influenced in various ways. An advertiser may specify conditions for displaying advertisements, *id.* at col. 3 ll. 59–66, an IP-content provider may store "calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises," *id.* at col. 4 ll. 9–13, and a subscriber may select "what kind of IP content" he or she "wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed," *id.* at col. 4 ll. 21–24. The specification further describes a remote control, *id.* at col. 7 ll. 7–50, that can be programmed according to the embodiment of Figures 7a–c:

***456**



Id. at Fig. 7a–c.

Figure 7a "shows the default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40," as well as "IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site of known address." *Id.* at col. 7 ll. 29–35. In TVnGO's view, an icon "could take the form of a commonly recognized logo, such as the Netflix logo." *TVnGO Ltd. (BVI) v. LG Elecs., Inc.*, 2020 WL 1899781, at *1 n.3 (D.N.J. Apr. 17, 2020). Figure 7b shows that, upon "pressing the key on the remote control unit 30 that corresponds to the icon 42, the IP content corresponding thereto is displayed within a small window 45." '220 patent col. 7 ll. 35–37. At this point, "[t]he icons 42, 43 and 44 remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit 30." *Id.* at col. 7 ll. 39–42. "On pressing a key a second time in succession, the IP content is re-sized so that its window 45 occupies substantially the whole area of the screen," as shown in Figure 7c. *Id.* at col. 7 ll. 42–44. "On pressing the key a third time in succession, the situation reverts to the default." *Id.* at col. 7 ll. 44–46. "Thus, each key operates as a three-way toggle that switches between three different display modes." *Id.* at col. 7 ll. 48–50.

II

TVnGO alleges that LGE's "Smart TVs" infringe the asserted patents, which it describes as generally directed to "methods and devices that make televisions 'smart.' " J.A. 103–04 (Complaint). After a *Markman* hearing, pre-and post-hearing briefing, and supplemental briefing, the district court issued a claim-construction opinion concluding that the two claim phrases at issue here render the asserted claims indefinite under § 112, paragraph 2. *TVnGO*, 2020 WL 1899781, at *7. In the district court's view, these phrases present "irreconcilable inconsistencies" within and across the asserted patents ("intra-" and "inter-patent" inconsistencies, respectively). *Id.* at *3. "Try as it might," the district court could not "construe the claims with any confidence." *Id.* at *4. Accordingly, the court ***457** held the asserted claims invalid. J.A. 18.[3] TVnGO appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

Discussion

"[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909, 134 S.Ct. 2120, 189 L.Ed.2d 37 (2014) (cleaned up). Accordingly, "[t]he Patent Act requires that a patent specification 'conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as [the] invention.' " *Id.* at 901, 134 S.Ct. 2120 (second alteration in original) (quoting 35 U.S.C. § 112, para. 2). Patent claims are indefinite if they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.*

"In the face of an allegation of indefiniteness, general principles of claim construction apply." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010)). The words of a claim "are generally given their ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). "[C]laims are to be read in light of the patent's specification and prosecution history." *Nautilus*, 572 U.S. at 908, 134 S.Ct. 2120.

Whether a claim is indefinite under 35 U.S.C. § 112 is ultimately a legal conclusion that we review de novo. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1228 (Fed. Cir. 2016). "Any fact critical to a holding on indefiniteness ... must be proven by the challenger by clear

and convincing evidence." *Id.* (alteration in original) (quoting *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003)). "If indefiniteness can be determined based solely on intrinsic evidence, our review is de novo." *Id.* Here, the district court relied on "a review of the claim terms, the specifications, and the prosecution histories" and declined to rely on TVnGO's expert testimony because it had "no support" in the patents. *TVnGO*, 2020 WL 1899781, at *6–7. Therefore, our review is de novo.

Two phrases are at issue here: "overlay activation criterion" and "overlay activation signal."[4] In the claims, these phrases relate generally to producing overlays (e.g., in Figures 7a–c above). *TVnGO*, 2020 WL 1899781, at *1. But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district court. Before addressing those inconsistencies, however, we first highlight the lack of intrinsic evidence in this case as to the meanings of these phrases.

For starters, the parties agree that neither "overlay activation criterion" nor "overlay activation signal" has an ordinary meaning in the art. Appellees' Br. 15; Reply Br. 13; *see TVnGO*, 2020 WL 1899781, at *3 & n.8. Instead, TVnGO contends that a skilled artisan would understand the disputed ***458** phrases by stitching together their constituent words.[5] Reply Br. 2 ("[T]he terms – "overlay," "activation," "criterion," and "signal" – are each easily understood, plain English words."); Oral Arg. at 2:24–46 (arguing that "overlay has a meaning, criterion has a meaning, signal has a meaning, activation has a meaning").[6] Here, we are unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean.

The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification, as both were added to the claims during prosecution. And the "limited information" provided by the prosecution history isn't enough to provide reasonable certainty here either. *TVnGO*, 2020 WL 1899781, at *6. Like the district court, we are unconvinced that the disputed phrases "are far from indefinite" merely because they were "added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed." Appellant's Br. 10; *see Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1380 (Fed. Cir. 2017). This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below as to the '339, '945, and '621 patents (discussed in Section I), and the '220 and '969 patents (discussed in Section II).

I

[1] We turn now to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '339, '934, and '621 patents: an inconsistency between the specification and the claims as to the result achieved by an "overlay activation criterion" or "overlay activation signal." Specifically, beyond its failure to mention the disputed phrases, the specification's use of the words "activates" and "activating" injects further uncertainty. While the specification uses these words to describe activating an already overlaid icon to display the IP content it represents, the claims appear to use the disputed phrases with respect to displaying an overlay in the first place—creating confusion as to which reading is correct. On the one hand, the specification states that "pressing on a specific key *activates* the displayed icon," '220 patent col. 7 ll. 19–22 (emphasis added), and references "the appropriate keys or button for *activating* each icon," *id.* at col. 7 ll. 24–25 (emphasis added). The claims, however, point in a different direction. With respect to the "criterion" term, '339 patent claims 1 and 15 recite "respond[ing] to an overlay activation criterion to cause the display screen to display the overlays." With respect to the "signal" term, '945 patent claims 1 and 12 state that the result of processing the "overlay activation signal" is "generating display drive signals causing the TV screen to display the overlays," and '621 patent claim 1 recites "generating display drive signals that cause the TV screen to display the one or more overlays."

TVnGO responds that the disputed terms cover both displaying an initial overlay and displaying IP material. *E.g.*, Reply Br. 26. But we are not persuaded that this suggestion clears up the uncertainty, as it could also be the case that one or the other of these options is right. Even if it may be possible to "ascribe some meaning" to the disputed limitation, as TVnGO's ***459** reading attempts, more is required: one of ordinary skill must have reasonable certainty. *Nautilus*, 572 U.S. at 911, 134 S.Ct. 2120. Here, a person of ordinary skill would encounter two claim phrases without an ordinary meaning in the art. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1345 (Fed. Cir. 2015) (indefinite term had no "plain meaning to one of skill in the art"). Upon consulting the specification, he or she would not find those phrases. *See id.* at 1344 (indefinite term not defined in specification);

Infinity Comput. Prods., Inc. v. Oki Data Ams., Inc., 987 F.3d 1053, 1056 (Fed. Cir. 2021) (indefinite term absent from specification). And when attempting to glean their meaning from the patent's use of "activates" and "activating," he or she would find that "the patents teach two different results"—i.e., display of IP content associated with an already displayed overlay versus display of an overlay in the first place—without reasonable certainty as to which reading is correct. *TVnGO*, 2020 WL 1899781, at *3. The asserted '339, '945, and '621 patent claims are therefore indefinite.

II

[2] We turn next to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '220 and '969 patents. This is an inconsistency between the independent and dependent claims regarding whether an "overlay activation criterion" comes from the internet or from a user's premises. On the one hand, the independent claims indicate that an "overlay activation criterion" is a type of "overlay-enabling digital data" that is provided "over the Internet" and "transmitted to the user's premises." '220 patent claims 1, 13; '969 patent claims 1, 13. But the dependent claims, on the other hand, state that "said overlay activation criterion includes ... a user command information," indicating that an "overlay activation criterion" can come from a user's premises via the remote control. '220 patent claims 9, 20; '969 patent claims 9, 20. As the district court explained, "the intrinsic evidence presents ... irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet—i.e., from the user's premises." *TVnGO*, 2020 WL 1899781, at *3.

For its part, TVnGO asserts that an overlay activation criterion "comes from the Internet," Reply Br. 3, arguing that, although " 'user commands' ... come from a user, not the Internet," "user command *information*" comes from the internet. Appellant's Br. 20; *see also* Reply Br. 19 ("There is no dispute that a 'user command' comes from a user."). This distinction lacks intrinsic support. Rather, the specification uses the word "command" only once, and in relation to the infrared (IR) remote control. '220 patent col. 7 ll. 2–3 ("An IR receiver 28 is adapted to receive IR commands from a remote control unit."). And when other dependent claims use "command," they similarly recite "receiving a command from a user at said user premises." *Id.* at claims 3, 15; '969 patent claims 3, 15. Accordingly, one of ordinary skill would lack reasonable certainty as to the source of an "overlay activation criterion"—whether the internet or a user's premises.

TVnGO argues in the alternative that this alleged inconsistency is better characterized as an allegation that the dependent claims are invalid for sweeping more broadly than the independent claims. *See* 35 U.S.C. § 112, para. 4. TVnGO misses the mark. The issue is not breadth of the dependent claims but their use of the disputed phrase in a way that contradicts the independent claims. The dependent claims ***460** state that "*said overlay activation criterion* includes ... a user command information," which conflicts with the independent claim's use of this same phrase. '220 patent claims 9, 20 (emphasis added); '969 patent claims 9, 20 (same). That prevents reasonable certainty.

Further, merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in "[o]ther claims of the patent in question," which "can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that. The asserted '220 and '969 patent claims are therefore indefinite.

Conclusion

The district court also relied on inter-patent inconsistencies. *TVnGO*, 2020 WL 1899781, at *4–6. We find it unnecessary to reach those, as the intra-patent grounds discussed above are sufficient to establish indefiniteness. We have considered TVnGO's remaining arguments and find them unpersuasive. The district court correctly concluded that the asserted claims are invalid for indefiniteness. We affirm.

AFFIRMED

All Citations

861 Fed.Appx. 453

Samsung
Ex. 1031 - Page 98

Footnotes

* Circuit Judge Sharon Prost vacated the position of Chief Judge on May 21, 2021.

1 The America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284, effective September 16, 2012, designated § 112, paragraph 2 as § 112(b). These patents stem from an application filed in 2005, so we refer to pre-AIA § 112.

2 For simplicity, all citations to the shared specification are to the '220 patent.

3 The claims are: '220 patent claims 1, 9–10, 13, 17, and 20; '945 patent claims 1, 4, 8, 9, 12, 15, 19, and 21; '696 patent claims 1, 9–10, 13, 17, and 20; '339 patent claims 1, 4–7, 12–15, and 18; and '621 patent claims 1, 4, 9, and 11.

4 The district court's analysis as to "overlay activation signal" applied equally to the phrase "special overlay activation signal" appearing in the '945 and '621 patents. *TVnGO*, 2020 WL 1899781, at *2 n.4.

5 At the district court, TVnGO contended that no construction was necessary and in the alternative proposed constructions which, LGE notes, expanded in response to the inconsistencies LGE raised. *See* Appellees' Br. 23–28.

6 No. 20-1837, http://www.cafc.uscourts.gov/oral-argument-recordings.

End of Document

© 2022 Thomson Reuters. No claim to original U.S. Government Works.

861 Fed.Appx. 453
This case was not selected for
publication in West's Federal Reporter.
See Fed. Rule of Appellate Procedure 32.1 generally
governing citation of judicial decisions issued on or after
Jan. 1, 2007. See also U.S.Ct. of App. Fed. Cir. Rule 32.1.
United States Court of Appeals, Federal Circuit.

TVNGO LTD. (BVI), Plaintiff-Appellant

v.

LG ELECTRONICS INC., LG Electronics USA, Inc., Defendants-Appellees

2020-1837

Decided: June 28, 2021

Synopsis

Background: Holder of patents which claimed methods and devices that made televisions "smart," meaning able to display both television content and internet streaming content, brought action against alleged infringers. The United States District Court for the District of New Jersey, Renée Marie Bumb, J., 2020 WL 1899781, issued a claim-construction opinion concluding that two claim phrases rendered the asserted claims indefinite. Patent holder appealed.

Holdings: The Court of Appeals, Prost, Circuit Judge, held that:

[1] intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," rendered the patent claims invalid for indefiniteness, and

[2] intra-patent inconsistencies between the independent and dependent claims rendered the patent claims invalid for indefiniteness.

Affirmed.

West Headnotes (3)

[1] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," in patents for "smart" televisions, rendered the patent claims invalid for indefiniteness; neither phrase had an ordinary meaning in the art, and while the specification used these words to describe activating an already overlaid icon to display the internet protocol (IP) content it represented, the claims appeared to use the disputed phrases with respect to displaying an overlay in the first place, thereby creating confusion as to which reading was correct. 35 U.S.C.A. § 112 (2005).

[2] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the independent and dependent claims, in patents for "smart" televisions, regarding whether an "overlay activation criterion" came from the internet or from a user's premises rendered the patent claims invalid for indefiniteness; while the independent claims indicated that an "overlay activation criterion" was a type of "overlay-enabling digital data" that was provided over the internet and transmitted to the user's premises, the dependent claims stated that "overlay activation criterion" included a user command information, indicating that an "overlay activation criterion" could come from a user's premises via the remote control. 35 U.S.C.A. § 112 (2005).

1 Cases that cite this headnote

[3] **Patents** ⇐ In general; utility

US Patent 8,132,220, US Patent 9,124,945, US Patent 9,392,339, US Patent 9,407,969, US Patent 9,794,621. Invalid.

***454** Appeal from the United States District Court for the District of New Jersey in No. 1:18-cv-10238-RMB-KMW, Judge Renee Marie Bumb.

Attorneys and Law Firms

Charles Cantine, Dunlap Bennett & Ludwig PLLC, New York, NY, argued for plaintiff-appellant.

William R. Peterson, Morgan, Lewis & Bockius LLP, Houston, TX, argued for defendants-appellees. Also represented by Natalie A. Bennett, Washington, DC; Eric Kraeutler, Philadelphia, PA; Jeremy Deane Peterson, PV Law LLP, Washington, DC.

Before Prost[*], Schall, and Reyna, Circuit Judges.

Opinion

Prost, Circuit Judge.

TVnGO Ltd. (BVI) ("TVnGO") appeals a final patentinvalidity judgment by the U.S. District Court for the District of New Jersey. We agree that the patent claims TVnGO asserts against LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, "LGE") are indefinite under 35 U.S.C. § 112, paragraph 2.[1] We therefore affirm.

Background

I

TVnGO owns U.S. Patent Nos. 8,132,220 ("the '220 patent"), 9,124,945 ("the '945 patent"), 9,392,339 ("the '339 patent"), 9,407,969 ("the '969 patent"), and 9,794,621 ("the '621 patent"), which share a specification and drawings.[2] The patents relate to providing "a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site." '220 patent col. 2 ll. 20–22. Figure 1, for example, depicts a "TV-Internet Integration Box" with inputs from a cable box and the internet, and an output to a television:

***455**

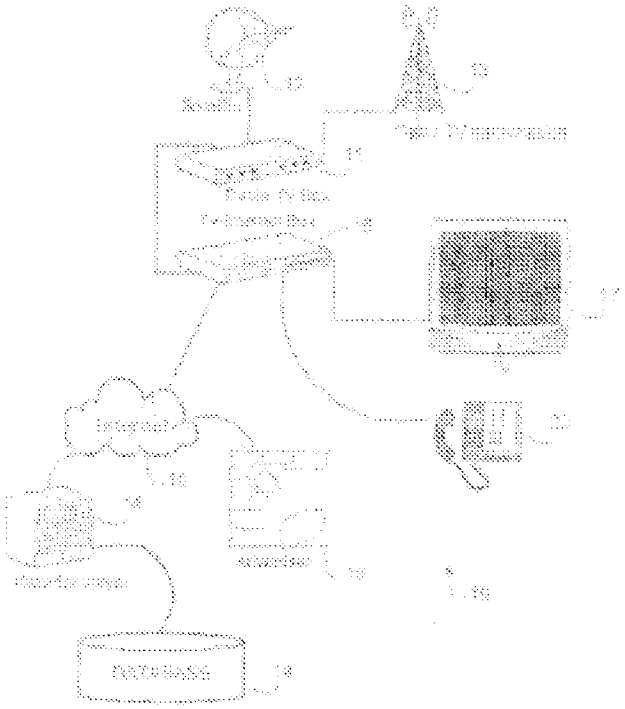


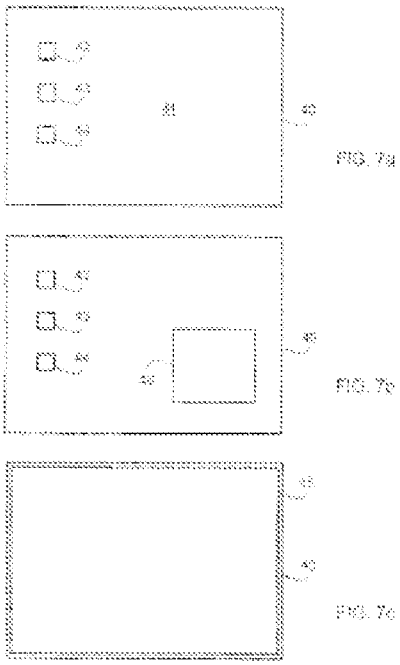
FIG. 1

Id. at Fig. 1.

This system can be influenced in various ways. An advertiser may specify conditions for displaying advertisements, *id.* at col. 3 ll. 59–66, an IP-content provider may store "calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises," *id.* at col. 4 ll. 9–13, and a subscriber may select "what kind of IP content" he or she "wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed," *id.* at col. 4 ll. 21–24. The specification further describes a remote control, *id.* at col. 7 ll. 7–50, that can be programmed according to the embodiment of Figures 7a–c:

***456**

Samsung
Ex. 1031 - Page 101



Id. at Fig. 7a–c.

Figure 7a "shows the default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40," as well as "IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site of known address." *Id.* at col. 7 ll. 29–35. In TVnGO's view, an icon "could take the form of a commonly recognized logo, such as the Netflix logo." *TVnGO Ltd. (BVI) v. LG Elecs., Inc.*, 2020 WL 1899781, at *1 n.3 (D.N.J. Apr. 17, 2020). Figure 7b shows that, upon "pressing the key on the remote control unit 30 that corresponds to the icon 42, the IP content corresponding thereto is displayed within a small window 45." '220 patent col. 7 ll. 35–37. At this point, "[t]he icons 42, 43 and 44 remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit 30." *Id.* at col. 7 ll. 39–42. "On pressing a key a second time in succession, the IP content is re-sized so that its window 45 occupies substantially the whole area of the screen," as shown in Figure 7c. *Id.* at col. 7 ll. 42–44. "On pressing the key a third time in succession, the situation reverts to the default." *Id.* at col. 7 ll. 44–46. "Thus, each key operates as a three-way toggle that switches between three different display modes." *Id.* at col. 7 ll. 48–50.

II

TVnGO alleges that LGE's "Smart TVs" infringe the asserted patents, which it describes as generally directed to "methods and devices that make televisions 'smart.' " J.A. 103–04 (Complaint). After a *Markman* hearing, pre-and post-hearing briefing, and supplemental briefing, the district court issued a claim-construction opinion concluding that the two claim phrases at issue here render the asserted claims indefinite under § 112, paragraph 2. *TVnGO*, 2020 WL 1899781, at *7. In the district court's view, these phrases present "irreconcilable inconsistencies" within and across the asserted patents ("intra-" and "inter-patent" inconsistencies, respectively). *Id.* at *3. "Try as it might," the district court could not "construe the claims with any confidence." *Id.* at *4. Accordingly, the court ***457** held the asserted claims invalid. J.A. 18.[3] TVnGO appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

Discussion

"[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909, 134 S.Ct. 2120, 189 L.Ed.2d 37 (2014) (cleaned up). Accordingly, "[t]he Patent Act requires that a patent specification 'conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as [the] invention.' " *Id.* at 901, 134 S.Ct. 2120 (second alteration in original) (quoting 35 U.S.C. § 112, para. 2). Patent claims are indefinite if they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.*

"In the face of an allegation of indefiniteness, general principles of claim construction apply." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010)). The words of a claim "are generally given their ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). "[C]laims are to be read in light of the patent's specification and prosecution history." *Nautilus*, 572 U.S. at 908, 134 S.Ct. 2120.

Whether a claim is indefinite under 35 U.S.C. § 112 is ultimately a legal conclusion that we review de novo. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1228 (Fed. Cir. 2016). "Any fact critical to a holding on indefiniteness ... must be proven by the challenger by clear

and convincing evidence." *Id.* (alteration in original) (quoting *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003)). "If indefiniteness can be determined based solely on intrinsic evidence, our review is de novo." *Id.* Here, the district court relied on "a review of the claim terms, the specifications, and the prosecution histories" and declined to rely on TVnGO's expert testimony because it had "no support" in the patents. *TVnGO*, 2020 WL 1899781, at *6–7. Therefore, our review is de novo.

Two phrases are at issue here: "overlay activation criterion" and "overlay activation signal."[4] In the claims, these phrases relate generally to producing overlays (e.g., in Figures 7a–c above). *TVnGO*, 2020 WL 1899781, at *1. But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district court. Before addressing those inconsistencies, however, we first highlight the lack of intrinsic evidence in this case as to the meanings of these phrases.

For starters, the parties agree that neither "overlay activation criterion" nor "overlay activation signal" has an ordinary meaning in the art. Appellees' Br. 15; Reply Br. 13; *see TVnGO*, 2020 WL 1899781, at *3 & n.8. Instead, TVnGO contends that a skilled artisan would understand the disputed ***458** phrases by stitching together their constituent words.[5] Reply Br. 2 ("[T]he terms – "overlay," "activation," "criterion," and "signal" – are each easily understood, plain English words."); Oral Arg. at 2:24–46 (arguing that "overlay has a meaning, criterion has a meaning, signal has a meaning, activation has a meaning").[6] Here, we are unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean.

The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification, as both were added to the claims during prosecution. And the "limited information" provided by the prosecution history isn't enough to provide reasonable certainty here either. *TVnGO*, 2020 WL 1899781, at *6. Like the district court, we are unconvinced that the disputed phrases "are far from indefinite" merely because they were "added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed." Appellant's Br. 10; *see Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1380 (Fed. Cir. 2017). This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below as to the '339, '945, and '621 patents (discussed in Section I), and the '220 and '969 patents (discussed in Section II).

I

[1] We turn now to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '339, '934, and '621 patents: an inconsistency between the specification and the claims as to the result achieved by an "overlay activation criterion" or "overlay activation signal." Specifically, beyond its failure to mention the disputed phrases, the specification's use of the words "activates" and "activating" injects further uncertainty. While the specification uses these words to describe activating an already overlaid icon to display the IP content it represents, the claims appear to use the disputed phrases with respect to displaying an overlay in the first place—creating confusion as to which reading is correct. On the one hand, the specification states that "pressing on a specific key *activates* the displayed icon," '220 patent col. 7 ll. 19–22 (emphasis added), and references "the appropriate keys or button for *activating* each icon," *id.* at col. 7 ll. 24–25 (emphasis added). The claims, however, point in a different direction. With respect to the "criterion" term, '339 patent claims 1 and 15 recite "respond[ing] to an overlay activation criterion to cause the display screen to display the overlays." With respect to the "signal" term, '945 patent claims 1 and 12 state that the result of processing the "overlay activation signal" is "generating display drive signals causing the TV screen to display the overlays," and '621 patent claim 1 recites "generating display drive signals that cause the TV screen to display the one or more overlays."

TVnGO responds that the disputed terms cover both displaying an initial overlay and displaying IP material. *E.g.*, Reply Br. 26. But we are not persuaded that this suggestion clears up the uncertainty, as it could also be the case that one or the other of these options is right. Even if it may be possible to "ascribe some meaning" to the disputed limitation, as TVnGO's ***459** reading attempts, more is required: one of ordinary skill must have reasonable certainty. *Nautilus*, 572 U.S. at 911, 134 S.Ct. 2120. Here, a person of ordinary skill would encounter two claim phrases without an ordinary meaning in the art. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1345 (Fed. Cir. 2015) (indefinite term had no "plain meaning to one of skill in the art"). Upon consulting the specification, he or she would not find those phrases. *See id.* at 1344 (indefinite term not defined in specification);

Infinity Comput. Prods., Inc. v. Oki Data Ams., Inc., 987 F.3d 1053, 1056 (Fed. Cir. 2021) (indefinite term absent from specification). And when attempting to glean their meaning from the patent's use of "activates" and "activating," he or she would find that "the patents teach two different results"—i.e., display of IP content associated with an already displayed overlay versus display of an overlay in the first place—without reasonable certainty as to which reading is correct. *TVnGO*, 2020 WL 1899781, at *3. The asserted '339, '945, and '621 patent claims are therefore indefinite.

II

[2] We turn next to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '220 and '969 patents. This is an inconsistency between the independent and dependent claims regarding whether an "overlay activation criterion" comes from the internet or from a user's premises. On the one hand, the independent claims indicate that an "overlay activation criterion" is a type of "overlay-enabling digital data" that is provided "over the Internet" and "transmitted to the user's premises." '220 patent claims 1, 13; '969 patent claims 1, 13. But the dependent claims, on the other hand, state that "said overlay activation criterion includes ... a user command information," indicating that an "overlay activation criterion" can come from a user's premises via the remote control. '220 patent claims 9, 20; '969 patent claims 9, 20. As the district court explained, "the intrinsic evidence presents ... irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet—i.e., from the user's premises." *TVnGO*, 2020 WL 1899781, at *3.

For its part, TVnGO asserts that an overlay activation criterion "comes from the Internet," Reply Br. 3, arguing that, although " 'user commands' ... come from a user, not the Internet," "user command *information*" comes from the internet. Appellant's Br. 20; *see also* Reply Br. 19 ("There is no dispute that a 'user command' comes from a user."). This distinction lacks intrinsic support. Rather, the specification uses the word "command" only once, and in relation to the infrared (IR) remote control. '220 patent col. 7 ll. 2–3 ("An IR receiver 28 is adapted to receive IR commands from a remote control unit."). And when other dependent claims use "command," they similarly recite "receiving a command from a user at said user premises." *Id.* at claims 3, 15; '969 patent claims 3, 15. Accordingly, one of ordinary skill would lack reasonable certainty as to the source of an "overlay activation criterion"—whether the internet or a user's premises.

TVnGO argues in the alternative that this alleged inconsistency is better characterized as an allegation that the dependent claims are invalid for sweeping more broadly than the independent claims. *See* 35 U.S.C. § 112, para. 4. TVnGO misses the mark. The issue is not breadth of the dependent claims but their use of the disputed phrase in a way that contradicts the independent claims. The dependent claims ***460** state that "*said overlay activation criterion* includes ... a user command information," which conflicts with the independent claim's use of this same phrase. '220 patent claims 9, 20 (emphasis added); '969 patent claims 9, 20 (same). That prevents reasonable certainty.

Further, merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in "[o]ther claims of the patent in question," which "can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that. The asserted '220 and '969 patent claims are therefore indefinite.

Conclusion

The district court also relied on inter-patent inconsistencies. *TVnGO*, 2020 WL 1899781, at *4–6. We find it unnecessary to reach those, as the intra-patent grounds discussed above are sufficient to establish indefiniteness. We have considered TVnGO's remaining arguments and find them unpersuasive. The district court correctly concluded that the asserted claims are invalid for indefiniteness. We affirm.

AFFIRMED

All Citations

861 Fed.Appx. 453

Samsung
Ex. 1031 - Page 104

Footnotes

* Circuit Judge Sharon Prost vacated the position of Chief Judge on May 21, 2021.

1 The America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284, effective September 16, 2012, designated § 112, paragraph 2 as § 112(b). These patents stem from an application filed in 2005, so we refer to pre-AIA § 112.

2 For simplicity, all citations to the shared specification are to the '220 patent.

3 The claims are: '220 patent claims 1, 9–10, 13, 17, and 20; '945 patent claims 1, 4, 8, 9, 12, 15, 19, and 21; '696 patent claims 1, 9–10, 13, 17, and 20; '339 patent claims 1, 4–7, 12–15, and 18; and '621 patent claims 1, 4, 9, and 11.

4 The district court's analysis as to "overlay activation signal" applied equally to the phrase "special overlay activation signal" appearing in the '945 and '621 patents. *TVnGO*, 2020 WL 1899781, at *2 n.4.

5 At the district court, TVnGO contended that no construction was necessary and in the alternative proposed constructions which, LGE notes, expanded in response to the inconsistencies LGE raised. *See* Appellees' Br. 23–28.

6 No. 20-1837, http://www.cafc.uscourts.gov/oral-argument-recordings.

End of Document

© 2022 Thomson Reuters. No claim to original U.S. Government Works.

861 Fed.Appx. 453
This case was not selected for
publication in West's Federal Reporter.
See Fed. Rule of Appellate Procedure 32.1 generally
governing citation of judicial decisions issued on or after
Jan. 1, 2007. See also U.S.Ct. of App. Fed. Cir. Rule 32.1.
United States Court of Appeals, Federal Circuit.

TVNGO LTD. (BVI), Plaintiff-Appellant

v.

LG ELECTRONICS INC., LG Electronics USA, Inc., Defendants-Appellees

2020-1837
|
Decided: June 28, 2021

Synopsis

Background: Holder of patents which claimed methods and devices that made televisions "smart," meaning able to display both television content and internet streaming content, brought action against alleged infringers. The United States District Court for the District of New Jersey, Renée Marie Bumb, J., 2020 WL 1899781, issued a claim-construction opinion concluding that two claim phrases rendered the asserted claims indefinite. Patent holder appealed.

Holdings: The Court of Appeals, Prost, Circuit Judge, held that:

[1] intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," rendered the patent claims invalid for indefiniteness, and

[2] intra-patent inconsistencies between the independent and dependent claims rendered the patent claims invalid for indefiniteness.

Affirmed.

West Headnotes (3)

[1] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," in patents for "smart" televisions, rendered the patent claims invalid for indefiniteness; neither phrase had an ordinary meaning in the art, and while the specification used these words to describe activating an already overlaid icon to display the internet protocol (IP) content it represented, the claims appeared to use the disputed phrases with respect to displaying an overlay in the first place, thereby creating confusion as to which reading was correct. 35 U.S.C.A. § 112 (2005).

[2] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the independent and dependent claims, in patents for "smart" televisions, regarding whether an "overlay activation criterion" came from the internet or from a user's premises rendered the patent claims invalid for indefiniteness; while the independent claims indicated that an "overlay activation criterion" was a type of "overlay-enabling digital data" that was provided over the internet and transmitted to the user's premises, the dependent claims stated that "overlay activation criterion" included a user command information, indicating that an "overlay activation criterion" could come from a user's premises via the remote control. 35 U.S.C.A. § 112 (2005).

1 Cases that cite this headnote

[3] **Patents** ⇐ In general; utility

US Patent 8,132,220, US Patent 9,124,945, US Patent 9,392,339, US Patent 9,407,969, US Patent 9,794,621. Invalid.

***454** Appeal from the United States District Court for the District of New Jersey in No. 1:18-cv-10238-RMB-KMW, Judge Renee Marie Bumb.

Attorneys and Law Firms

Charles Cantine, Dunlap Bennett & Ludwig PLLC, New York, NY, argued for plaintiff-appellant.

William R. Peterson, Morgan, Lewis & Bockius LLP, Houston, TX, argued for defendants-appellees. Also represented by Natalie A. Bennett, Washington, DC; Eric Kraeutler, Philadelphia, PA; Jeremy Deane Peterson, PV Law LLP, Washington, DC.

Before Prost[*], Schall, and Reyna, Circuit Judges.

Opinion

Prost, Circuit Judge.

TVnGO Ltd. (BVI) ("TVnGO") appeals a final patentinvalidity judgment by the U.S. District Court for the District of New Jersey. We agree that the patent claims TVnGO asserts against LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, "LGE") are indefinite under 35 U.S.C. § 112, paragraph 2.[1] We therefore affirm.

Background

I

TVnGO owns U.S. Patent Nos. 8,132,220 ("the '220 patent"), 9,124,945 ("the '945 patent"), 9,392,339 ("the '339 patent"), 9,407,969 ("the '969 patent"), and 9,794,621 ("the '621 patent"), which share a specification and drawings.[2] The patents relate to providing "a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site." '220 patent col. 2 ll. 20–22. Figure 1, for example, depicts a "TV-Internet Integration Box" with inputs from a cable box and the internet, and an output to a television:

***455**

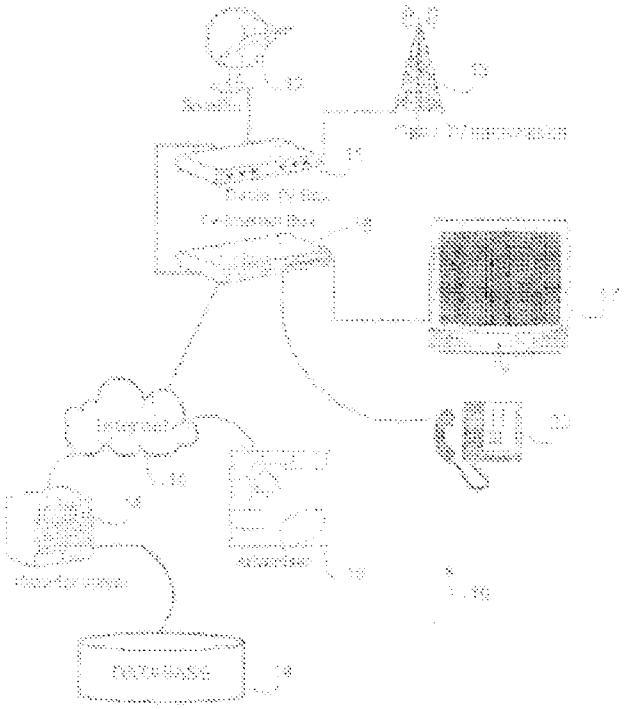


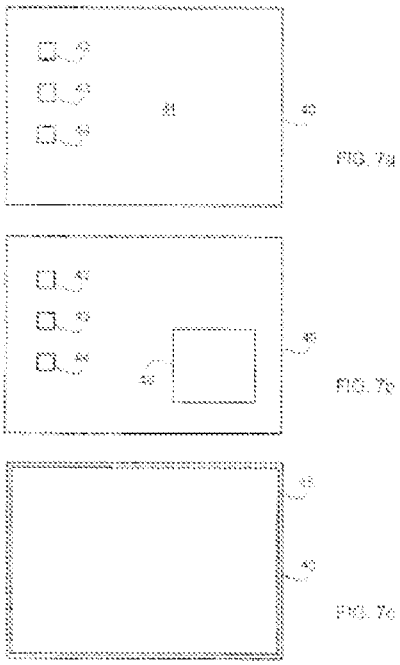
FIG. 1

Id. at Fig. 1.

This system can be influenced in various ways. An advertiser may specify conditions for displaying advertisements, *id.* at col. 3 ll. 59–66, an IP-content provider may store "calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises," *id.* at col. 4 ll. 9–13, and a subscriber may select "what kind of IP content" he or she "wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed," *id.* at col. 4 ll. 21–24. The specification further describes a remote control, *id.* at col. 7 ll. 7–50, that can be programmed according to the embodiment of Figures 7a–c:

***456**

Samsung
Ex. 1031 - Page 107



Id. at Fig. 7a–c.

Figure 7a "shows the default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40," as well as "IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site of known address." *Id.* at col. 7 ll. 29–35. In TVnGO's view, an icon "could take the form of a commonly recognized logo, such as the Netflix logo." *TVnGO Ltd. (BVI) v. LG Elecs., Inc.*, 2020 WL 1899781, at *1 n.3 (D.N.J. Apr. 17, 2020). Figure 7b shows that, upon "pressing the key on the remote control unit 30 that corresponds to the icon 42, the IP content corresponding thereto is displayed within a small window 45." '220 patent col. 7 ll. 35–37. At this point, "[t]he icons 42, 43 and 44 remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit 30." *Id.* at col. 7 ll. 39–42. "On pressing a key a second time in succession, the IP content is re-sized so that its window 45 occupies substantially the whole area of the screen," as shown in Figure 7c. *Id.* at col. 7 ll. 42–44. "On pressing the key a third time in succession, the situation reverts to the default." *Id.* at col. 7 ll. 44–46. "Thus, each key operates as a three-way toggle that switches between three different display modes." *Id.* at col. 7 ll. 48–50.

II

TVnGO alleges that LGE's "Smart TVs" infringe the asserted patents, which it describes as generally directed to "methods and devices that make televisions 'smart.' " J.A. 103–04 (Complaint). After a *Markman* hearing, pre-and post-hearing briefing, and supplemental briefing, the district court issued a claim-construction opinion concluding that the two claim phrases at issue here render the asserted claims indefinite under § 112, paragraph 2. *TVnGO*, 2020 WL 1899781, at *7. In the district court's view, these phrases present "irreconcilable inconsistencies" within and across the asserted patents ("intra-" and "inter-patent" inconsistencies, respectively). *Id.* at *3. "Try as it might," the district court could not "construe the claims with any confidence." *Id.* at *4. Accordingly, the court ***457** held the asserted claims invalid. J.A. 18.[3] TVnGO appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

Discussion

"[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909, 134 S.Ct. 2120, 189 L.Ed.2d 37 (2014) (cleaned up). Accordingly, "[t]he Patent Act requires that a patent specification 'conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as [the] invention.' " *Id.* at 901, 134 S.Ct. 2120 (second alteration in original) (quoting 35 U.S.C. § 112, para. 2). Patent claims are indefinite if they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.*

"In the face of an allegation of indefiniteness, general principles of claim construction apply." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010)). The words of a claim "are generally given their ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). "[C]laims are to be read in light of the patent's specification and prosecution history." *Nautilus*, 572 U.S. at 908, 134 S.Ct. 2120.

Whether a claim is indefinite under 35 U.S.C. § 112 is ultimately a legal conclusion that we review de novo. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1228 (Fed. Cir. 2016). "Any fact critical to a holding on indefiniteness ... must be proven by the challenger by clear

and convincing evidence." *Id.* (alteration in original) (quoting *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003)). "If indefiniteness can be determined based solely on intrinsic evidence, our review is de novo." *Id.* Here, the district court relied on "a review of the claim terms, the specifications, and the prosecution histories" and declined to rely on TVnGO's expert testimony because it had "no support" in the patents. *TVnGO*, 2020 WL 1899781, at *6–7. Therefore, our review is de novo.

Two phrases are at issue here: "overlay activation criterion" and "overlay activation signal."[4] In the claims, these phrases relate generally to producing overlays (e.g., in Figures 7a–c above). *TVnGO*, 2020 WL 1899781, at *1. But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district court. Before addressing those inconsistencies, however, we first highlight the lack of intrinsic evidence in this case as to the meanings of these phrases.

For starters, the parties agree that neither "overlay activation criterion" nor "overlay activation signal" has an ordinary meaning in the art. Appellees' Br. 15; Reply Br. 13; *see TVnGO*, 2020 WL 1899781, at *3 & n.8. Instead, TVnGO contends that a skilled artisan would understand the disputed ***458** phrases by stitching together their constituent words.[5] Reply Br. 2 ("[T]he terms – "overlay," "activation," "criterion," and "signal" – are each easily understood, plain English words."); Oral Arg. at 2:24–46 (arguing that "overlay has a meaning, criterion has a meaning, signal has a meaning, activation has a meaning").[6] Here, we are unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean.

The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification, as both were added to the claims during prosecution. And the "limited information" provided by the prosecution history isn't enough to provide reasonable certainty here either. *TVnGO*, 2020 WL 1899781, at *6. Like the district court, we are unconvinced that the disputed phrases "are far from indefinite" merely because they were "added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed." Appellant's Br. 10; *see Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1380 (Fed. Cir. 2017). This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below as to the '339, '945, and '621 patents (discussed in Section I), and the '220 and '969 patents (discussed in Section II).

I

[1] We turn now to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '339, '934, and '621 patents: an inconsistency between the specification and the claims as to the result achieved by an "overlay activation criterion" or "overlay activation signal." Specifically, beyond its failure to mention the disputed phrases, the specification's use of the words "activates" and "activating" injects further uncertainty. While the specification uses these words to describe activating an already overlaid icon to display the IP content it represents, the claims appear to use the disputed phrases with respect to displaying an overlay in the first place—creating confusion as to which reading is correct. On the one hand, the specification states that "pressing on a specific key *activates* the displayed icon," '220 patent col. 7 ll. 19–22 (emphasis added), and references "the appropriate keys or button for *activating* each icon," *id.* at col. 7 ll. 24–25 (emphasis added). The claims, however, point in a different direction. With respect to the "criterion" term, '339 patent claims 1 and 15 recite "respond[ing] to an overlay activation criterion to cause the display screen to display the overlays." With respect to the "signal" term, '945 patent claims 1 and 12 state that the result of processing the "overlay activation signal" is "generating display drive signals causing the TV screen to display the overlays," and '621 patent claim 1 recites "generating display drive signals that cause the TV screen to display the one or more overlays."

TVnGO responds that the disputed terms cover both displaying an initial overlay and displaying IP material. *E.g.*, Reply Br. 26. But we are not persuaded that this suggestion clears up the uncertainty, as it could also be the case that one or the other of these options is right. Even if it may be possible to "ascribe some meaning" to the disputed limitation, as TVnGO's ***459** reading attempts, more is required: one of ordinary skill must have reasonable certainty. *Nautilus*, 572 U.S. at 911, 134 S.Ct. 2120. Here, a person of ordinary skill would encounter two claim phrases without an ordinary meaning in the art. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1345 (Fed. Cir. 2015) (indefinite term had no "plain meaning to one of skill in the art"). Upon consulting the specification, he or she would not find those phrases. *See id.* at 1344 (indefinite term not defined in specification);

Infinity Comput. Prods., Inc. v. Oki Data Ams., Inc., 987 F.3d 1053, 1056 (Fed. Cir. 2021) (indefinite term absent from specification). And when attempting to glean their meaning from the patent's use of "activates" and "activating," he or she would find that "the patents teach two different results"—i.e., display of IP content associated with an already displayed overlay versus display of an overlay in the first place—without reasonable certainty as to which reading is correct. *TVnGO*, 2020 WL 1899781, at *3. The asserted '339, '945, and '621 patent claims are therefore indefinite.

II

[2] We turn next to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '220 and '969 patents. This is an inconsistency between the independent and dependent claims regarding whether an "overlay activation criterion" comes from the internet or from a user's premises. On the one hand, the independent claims indicate that an "overlay activation criterion" is a type of "overlay-enabling digital data" that is provided "over the Internet" and "transmitted to the user's premises." '220 patent claims 1, 13; '969 patent claims 1, 13. But the dependent claims, on the other hand, state that "said overlay activation criterion includes ... a user command information," indicating that an "overlay activation criterion" can come from a user's premises via the remote control. '220 patent claims 9, 20; '969 patent claims 9, 20. As the district court explained, "the intrinsic evidence presents ... irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet—i.e., from the user's premises." *TVnGO*, 2020 WL 1899781, at *3.

For its part, TVnGO asserts that an overlay activation criterion "comes from the Internet," Reply Br. 3, arguing that, although " 'user commands' ... come from a user, not the Internet," "user command *information*" comes from the internet. Appellant's Br. 20; *see also* Reply Br. 19 ("There is no dispute that a 'user command' comes from a user."). This distinction lacks intrinsic support. Rather, the specification uses the word "command" only once, and in relation to the infrared (IR) remote control. '220 patent col. 7 ll. 2–3 ("An IR receiver 28 is adapted to receive IR commands from a remote control unit."). And when other dependent claims use "command," they similarly recite "receiving a command from a user at said user premises." *Id.* at claims 3, 15; '969 patent claims 3, 15. Accordingly, one of ordinary skill would lack reasonable certainty as to the source of an "overlay activation criterion"—whether the internet or a user's premises.

TVnGO argues in the alternative that this alleged inconsistency is better characterized as an allegation that the dependent claims are invalid for sweeping more broadly than the independent claims. *See* 35 U.S.C. § 112, para. 4. TVnGO misses the mark. The issue is not breadth of the dependent claims but their use of the disputed phrase in a way that contradicts the independent claims. The dependent claims ***460** state that "*said overlay activation criterion* includes ... a user command information," which conflicts with the independent claim's use of this same phrase. '220 patent claims 9, 20 (emphasis added); '969 patent claims 9, 20 (same). That prevents reasonable certainty.

Further, merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in "[o]ther claims of the patent in question," which "can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that. The asserted '220 and '969 patent claims are therefore indefinite.

Conclusion

The district court also relied on inter-patent inconsistencies. *TVnGO*, 2020 WL 1899781, at *4–6. We find it unnecessary to reach those, as the intra-patent grounds discussed above are sufficient to establish indefiniteness. We have considered TVnGO's remaining arguments and find them unpersuasive. The district court correctly concluded that the asserted claims are invalid for indefiniteness. We affirm.

AFFIRMED

All Citations

861 Fed.Appx. 453

Samsung
Ex. 1031 - Page 110

Footnotes

* Circuit Judge Sharon Prost vacated the position of Chief Judge on May 21, 2021.

1 The America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284, effective September 16, 2012, designated § 112, paragraph 2 as § 112(b). These patents stem from an application filed in 2005, so we refer to pre-AIA § 112.

2 For simplicity, all citations to the shared specification are to the '220 patent.

3 The claims are: '220 patent claims 1, 9–10, 13, 17, and 20; '945 patent claims 1, 4, 8, 9, 12, 15, 19, and 21; '696 patent claims 1, 9–10, 13, 17, and 20; '339 patent claims 1, 4–7, 12–15, and 18; and '621 patent claims 1, 4, 9, and 11.

4 The district court's analysis as to "overlay activation signal" applied equally to the phrase "special overlay activation signal" appearing in the '945 and '621 patents. *TVnGO*, 2020 WL 1899781, at *2 n.4.

5 At the district court, TVnGO contended that no construction was necessary and in the alternative proposed constructions which, LGE notes, expanded in response to the inconsistencies LGE raised. *See* Appellees' Br. 23–28.

6 No. 20-1837, http://www.cafc.uscourts.gov/oral-argument-recordings.

End of Document

© 2022 Thomson Reuters. No claim to original U.S. Government Works.

2020 WL 1899781
Only the Westlaw citation is currently available.
United States District Court, D. New Jersey,
Camden Vicinage.

TVNGO LTD. (BVI), Plaintiff,

v.

LG ELECTRONICS, INC. and LG Electronics U.S.A., Inc., Defendants.

Civil No. 18-10238 (RMB/KMW)
|
Signed 04/16/2020
|
Filed 04/17/2020

Attorneys and Law Firms

EYET LAW LLC, By: Matthew T. Eyet, Esq., 7 Livingston Avenue, Suite 1105, New Brunswick, New Jersey 08901 and DUNLAP BENNETT & LUDWIG PPLC, By: Charles E. Cantine, Esq., Joseph Diamante, Esq., 349 Fifth Avenue, New York, New York 10036, Counsel for Plaintiff.

WALSH PIZZI O'REILLY FALANGA LLP, By: Liza M. Walsh, Esq., Selina M. Ellis, Esq., One Riverfront Plaza, 1037 Raymond Boulevard, Suite 600, Newark, New Jersey 07102 and MORGAN, LEWIS & BOCKIUS LLP, By: Natalie Bennett, Esq., Collin W. Park, Esq., Eric Kraeutler, Esq., Ghee J. Lee, Esq., 1111 Pennsylvania Avenue, NW, Washington, D.C. 20004-2541, Counsel for Defendants.

OPINION

BUMB, UNITED STATES DISTRICT JUDGE:

***1** In this patent infringement suit, Plaintiff TVnGO Ltd. (BVI) asserts that Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, "LG"), are infringing five of TVnGO's patents[1] which claim methods and devices that make televisions "smart"-- i.e., able to display both television content and internet streaming content. Presently before the Court is the issue of indefiniteness, which LG raised in connection with the Court's claim construction inquiry. The Court has carefully considered the parties' pre-hearing submissions and post-hearing briefs, the parties' presentations made at the claim construction hearing held on January 8, 2020, as well as supplemental briefing which this Court ordered on March 6, 2020. For the reasons stated herein, the Court holds that '220 Patent claims 1, 9, 10, 13, 17, and 20; '945 Patent claims 1, 4, 8, 9, 12, 15, 19, 21; '696 Patent claims 1, 9, 10, 13, 17 and 20; '339 Patent claims 1, 4-7, 12-15 and 18; and '621 Patent claims 1, 4, 9, 11 are indefinite, and therefore not amenable to construction.[2]

I.

According to TVnGO, the main inventive feature of its technology to which the Patents-in-Suit are addressed is the generation and display of "overlays" which appear on a user's (i.e., a person's) television screen, thereby creating a user-friendly mechanism through which a user can simultaneously view broadcast TV content and Internet content. [Transcript p. 53, 60] Thus, for example, in Figures 7a, 7b and 7c of the Patents-in-Suit, which depict a television set (item 40), items 42 through 45 are overlays, or icons,[3] containing Internet content, and item 41 is broadcast TV content:

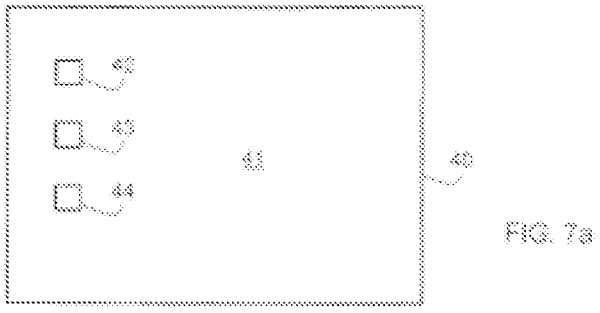


FIG. 7a

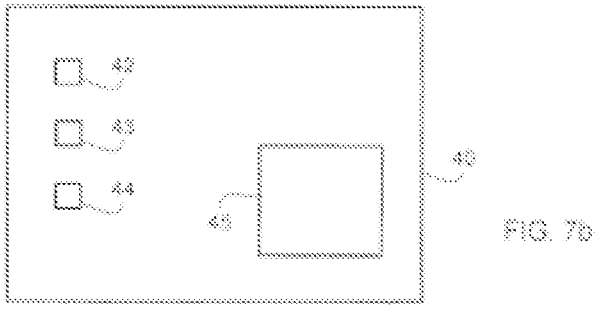


FIG. 7b

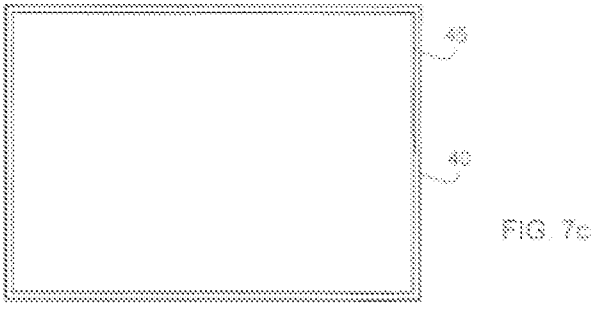


FIG. 7c

WESTLAW © 2022 Thomson Reuters. No claim to original U.S. Government Works.

According to the specifications, if a user wishes to view the content represented by a particular overlay-- for example, item 42-- she may use a particular key on her remote control to select the desired overlay, which will result in the display of a secondary window, item 45. Engaging the same key for a second time will enlarge the secondary window to occupy substantially the whole area of the television screen, as shown in Figure 7c. Engaging the same key for a third time will cause the television screen display to revert to the situation shown in Figure 7a. ['220 Patent, 7:25-50; '945 Patent, 7:35-60; '339 Patent, 7:28-50; '969 Patent, 7:35-60; '621 Patent, 7:43-65]. The parties dispute whether the Patents-in-Suit "particularly ... and distinctly" disclose, 35 U.S.C. § 112(b), how the patented technology functions to produce items 42 through 45.

***2** The claim terms primarily at issue are "overlay activation criterion" and "overlay activation signal."[4] Copies of the Patents-in-Suit are attached to this Opinion as Exhibits A through E.[5]

II.

Patent claims must "particularly point[ ] out and distinctly claim[ ] the subject matter" of the invention. 35 U.S.C. § 112(b). If a claim does not do so, it is invalid as indefinite. Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 902 (2014). "[A] patent claim is indefinite if, when 'read in light of the specification delineating the patent, and the prosecution history, the claim fails to inform, with reasonable certainty, those skilled in the art[6] about the scope of the invention.' " BASF Corp. v. Johnson Matthey Inc., 875 F.3d 1360, 1365 (Fed. Cir. 2017) (quoting Nautilus). " 'The internal coherence and context assessment of the patent, and whether it conveys claim meaning with reasonable certainty, are questions of law.' " United Access Techs., LLC v. AT & T Corp., 757 F. App'x 960, 969 (Fed. Cir. 2019) (quoting Teva Pharm. USA, Inc. v. Sandoz, Inc., 789 F.3d 1335, 1342 (Fed. Cir. 2015)).

Likewise, claim construction is an issue of law, Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996), and "[a] determination that a patent claim is invalid for failure to meet the definiteness requirement of 35 U.S.C. § 112, ¶ 2 is a conclusion that is drawn from the court's performance of its duty as the construer of patent claims." Fisher-Price, Inc. v. Graco Children's Prod., Inc., 154 F. App'x 903, 906 (Fed. Cir. 2005) (internal citation and quotation omitted); see also, Biosig Instruments, Inc. v. Nautilus, Inc., 783 F.3d 1374, 1377 (Fed. Cir. 2015) ("In the face of an allegation of indefiniteness, general principles of claim construction apply.").[7]

III.

***3** In conducting the indefiniteness inquiry, the Court considers: the language of the claims; the specifications; and the prosecution histories of the Patents-in-Suit. BASF Corp., 875 F.3d at 1365 (quoting Nautilus). Section A considers the claims and the specifications of the Patents-in-Suit. Section B addresses the prosecution histories.

A.

As LG has persuasively demonstrated, the use of the terms "overlay activation criterion" and "overlay activation signal"--neither of which are terms of art, nor defined by the specifications[8]-- create irreconcilable inconsistencies into the Patents-in-Suit. These inconsistencies manifest not only when a POSA views each Patent-in-Suit individually ("intra-patent inconsistencies"), but as well as when a POSA attempts to understand the terms across the span of the Patents-in-Suit ("inter-patent inconsistencies"). Consequently, these inconsistencies render each Patent-in-Suit indefinite.

Intra-Patent Inconsistencies

Three intra-patent inconsistencies exist: (1) the '220 and '969 Patents both have the same inconsistency; (2) the '945 and '621 Patents both have another inconsistency; (3) and the '339 Patent has yet another inconsistency.

First, independent claims 1 and 13 of each of the '220 and '969 Patents use the term "overlay activation criterion" in a manner that is inconsistent with the use of that same term in dependent claims 9 and 20, and the specifications of both patents. In claims 1 and 13, "overlay activation criterion" must necessarily come from the Internet because the claim states that "overlay activation criterion" is a component of the "overlay-enabling digital data" which data, the claim explicitly states, is provided "over the Internet." ['220 Patent, 8:61-9:7, 10:25-40; '969 Patent, 9:7-20, 10:36-50] However, claims 9 and 20, as well as the specifications, state that "user command information" may be a component of "overlay

activation criterion" and that such information is provided at the user's premises and not over the Internet. ['220 Patent, 7:2-6, claim 3, claim 15; '969 Patent, 7:10-15, claims 3 and 15] Thus, the intrinsic evidence presents a POSA with irreconcilably inconsistent information: the '220 and '969 Patents indicate that "overlay activation criterion" comes from the Internet and simultaneously not from the Internet-- i.e., from the user's premises. To state it more to the point, the Patents fail to inform a POSA of the invention's scope with reasonable certainty.

Second, the claims of the '945 and '621 Patents are internally inconsistent with their own specifications. The claims in which "overlay activation signal" appear refer to a signal that causes overlays stored in memory to be displayed. [See, e.g., '945 Patent, claim 1 at 9:23-26, claim 12 at 10:35-38; '621 Patent, claim 1 at 9:21-24] However, the specifications of both patents use "activate" to refer only to the pressing of a remote control key corresponding to a displayed overlay thereby "activating" the overlay to display the IP content to which the overlay corresponds. ['945 Patent, 7:16-34, 45-49; '621 Patent, 7:25-42, 52-57] Thus, a POSA looking at either the '945 Patent or the '621 Patent cannot know what happens upon receipt of an overlay activation signal because the patents teach two different results. A POSA is left to wonder, or in other words, is confused: does the overlay activation signal result in the display of a stored overlay, or does it result in the display of IP content? The patents provide no guidance as to how a POSA could confidently choose between the two possibilities. See Media Rights Techs., Inc. v. Capital One Fin. Corp., 800 F.3d 1366, 1371 (Fed. Cir. 2015) (explaining that indefiniteness results when "no informed and confident choice is available among the contending definitions.").

***4** Third, and similarly, the '339 Patent's use of the term "overlay activation criterion" is inconsistent with the meaning of "activating" an overlay in its own specification. Claim 1 of the '339 Patent states that an overlay activation criterion causes the display of overlays,[9] whereas the '339 Patent's specification, like the specifications of the '945 and '621 Patents, indicates that activating an overlay results in the display of IP content. ['339 Patent, 7:11-27]

TVnGO's attempts to give clarity to the scope of the inventions are unpersuasive. Rather than reconcile inconsistencies, or provide clear answers to the Court's questions-- neither of which TVnGO has been able to do, despite several opportunities to do so-- TVnGO asks the Court to reject LG's arguments because they are merely "attorney argument" "unsupported by admissible evidence." [Supplemental Brief, Dkt. 81, p. 2] LG's arguments, however, are supported by the Patents themselves, which, of course, are admissible evidence. The Court has endeavored to construe the claims, most of which TVnGO contends needs no construction because their meaning is plain. Try as it might, the Court has been unable to do so. Having considered the claims, specifications, and prosecution histories of the Patents-in-Suit, as set forth supra (and infra), the Court cannot construe the claims with any confidence. See also, United Access Techs., 757 F. App'x at 969 ("The internal coherence and context assessment of the patent, and whether it conveys claim meaning with reasonable certainty, are questions of law.").

Inter-Patent Inconsistencies

As this Court's above discussion of the '339 and '621 Patents has previewed, "overlay activation criterion" and "overlay activation signal" are used interchangeably between the '339 Patent and the '621 Patent to achieve the same result: display of an overlay. [See '339 Patent, claim 1, line 8-10; '621 Patent, claim 1, lines 21-24] However, the specifications provide different meanings for these two words. "Criterion," according to the specifications, means condition, such as time and channel information [see, e.g., '339 Patent 3:61-67; '621 Patent 4:26-28], whereas "signal" means a selection or indication from the user [see, e.g. '339 Patent 4:64-67; '621 Patent 5:8-12]. According to the specifications, and as TVnGO states in its brief, the "criterion" comes from the Internet, whereas the "signal" comes from the user via the remote control. [Dkt. No. 75, p. 8, 10, 14] The simultaneous use of two different words with different meanings to achieve the same result-- display of an overlay-- produces an irreconcilable inconsistency within the Patents-in-Suit which cannot inform a POSA, with reasonable certainty, the scope of the invention. Because "no informed and confident choice is available among the contending definitions," Media Rights Techs., Inc., 800 F.3d at 1371, the claim terms are indefinite. Contrast Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) ("Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims.").

***5** Similarly, in the '220 Patent, for example, when the overlay activation criterion is met, the result is the generation of an overlay. ['220 Patent, claim 1, lines 9-11; see also '969 Patent, claim 1, lines 21-24] In contrast, however, in the '339 Patent, the result of the overlay activation criterion

being met is the display of an overlay. ['339 Patent, claim 1, lines 8-10] TVnGO maintains this is exactly as it should be-- that "when we say 'generate' [an overlay] what we mean is display." [Transcript, p. 56; see also p. 98, 108 (using "display" and "generate" interchangeably); Dkt. 75, p. 13 ("When the claim language describes displaying the overlay, it is referring to generating the overlay."); Dkt. No. 78, p. 2 (" 'generating' ... means generating 'display screens' ")] However, TVnGO cannot point to anything in the claim language, or anywhere else, from which a POSA could discern why two different words[10] are used to denote the same result. Instead, TVnGO insists, without any intrinsic evidentiary support, that two different words have the same meaning.[11] This inherent inconsistency injects even more uncertainty into the Patents-in-Suit.

Confronted with these irreconcilable inconsistencies, TVnGO mischaracterizes LG's argument. According to TVnGO, "LG's indefiniteness arguments as to overlay activation criterion and overlay activation signal are premised solely on the proposition that claim terms *must* have the same meaning across all patents." [Dkt. No. 75, p. 3 (italics in the brief)] LG's argument, however, is not so broad. LG asserts, and this Court agrees, the reason the claim terms are indefinite is not simply because the terms are used differently. Rather, the terms are indefinite because the different uses cannot be reconciled in a manner that informs a POSA, to a reasonable degree of certainty, of the meaning of claim terms.

Moreover, in an attempt to fill in the blanks of the Patents-in-Suit, TVnGO presents the testimony of its expert, Dr. Sprenger. In explaining to the Court what a POSA would understand, however, Dr. Sprenger actually creates more blanks. With respect to "overlay activation criteria," Dr. Sprenger explains,

> [i]n the most basic situation where there is no other information from the user regarding preferences for IP content, or specific times or channels to view content (e.g., all times and all channels are available), the TV-Internet Integration Box checks its own timetable stored in memory (see, e.g., '220 Patent at 4:28-32), determines whether the overlay activation criteria is met (e.g., confirming that the user is watching Channel 3 at 7:00 PM which would match the overlay activation criteria embedded in OEDD [the overlay enabling digital data] 2), and the TV-Internet Integration Box combines the overlay-enabling digital data with the TV video signal received at the first input, outputting the combined video signal to the TV set.
>
> ***6** (Dkt. 75-2, Sprenger Suppl. Decl. ¶ 12)

First, nothing in the Patents-in-Suit discusses at all a situation where "there is no other information from the user regarding preferences for IP content." Indeed, Dr. Sprenger's citation to the '220 Patent specification provides no support for his statements; 4:28-32 of the '220 Patent explains what happens when a user / subscriber *does* provide information concerning "what type of IP data is to be displayed and when." ['220 Patent 4:31-32].

Second, Dr. Sprenger's explanation introduces an entirely new concept that also has no support anywhere in the Patents-in-Suit: different types of "overlay enabling digital data" ("OEDD")-- e.g., "OEDD 1"; "OEDD 2" and "OEDD 3." (Dkt. 75-2, Sprenger Suppl. Decl. ¶ 10-12, emphasis added) The fact that Dr. Sprenger, in attempting to explain what the Patents-in-Suit disclose, must create a new embodiment of the patented technology, using entirely new terms, clearly illustrates that the specifications do not inform a POSA with a reasonable certainty as to what the Patents-in-Suit claim.

B.

Lastly, the prosecution histories do not save the disputed claims from indefiniteness. The histories provide nothing more than what limited information is disclosed by the specifications: "overlay activation criterion" can include timing and channel information, and an overlay activation signal is received from a user. [See Dkt. 75, p. 5, 10] As discussed above, this information alone does not allow a POSA to reconcile the claims' inconsistencies.

Moreover, the Court is unpersuaded by TVnGO's argument that the patent examiners must not have found the terms indefinite because if they had, they would not have granted the Patents. First, whether an individual patent examiner, or examiners, understood what the claim terms meant is not the standard for indefiniteness. Second, the argument is tantamount to a statement of the basic statutory principle that a patent is presumed valid, 35 U.S.C. § 282. This principle is already captured by the allocation of the burden of proof to LG (as the party seeking to invalidate the patents), id., and the standard of proof by clear and convincing evidence, which this Court has employed. Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 95 (2011). The presumption alone cannot rebut

the intrinsic evidence demonstrating that the disputed claim terms are indefinite.

Sonix Tech. Co. v. Publications Int'l, Ltd., 844 F.3d 1370 (Fed. Cir. 2017), upon which TVnGO relies, does not stand for the proposition that a patent examiner's knowing allowance of claims *by itself* defeats a conclusion of indefiniteness. In Sonix, the Court reversed the District Court's indefiniteness holding because "the intrinsic evidence provided guidance as to the scope of the claims." 844 F.3d at 1377. In this case, as explained, the intrinsic evidence provides no such guidance. To the contrary, it provides confusion. Indeed, Sonix expressly states that "application [of the disputed claim terms] by the examiner and an expert do not, *on their own*, establish" definiteness. 844 F.3d at 1380 (emphasis added).

*7 In the Court's final analysis, a review of the claim terms, the specifications, and the prosecution histories leave the Court with unresolved inconsistencies as well as unanswered questions.

IV.

Because the Court cannot construe the claims, they are indefinite. Accordingly, for the above reasons, the Court holds that '220 Patent claims 1, 9, 10, 13, 17, and 20; '945 Patent claims 1, 4, 8, 9, 12, 15, 19, 21; '696 Patent claims 1, 9, 10, 13, 17 and 20; '339 Patent claims 1, 4-7, 12-15 and 18; and '621 Patent claims 1, 4, 9, 11 are indefinite, and therefore not amenable to construction. An Order accompanies this Opinion.

All Citations

Not Reported in Fed. Supp., 2020 WL 1899781

Footnotes

1 The Patents-in-Suit are U.S. Patent Nos. 8,132,220; 9,124,945; 9,392,339; 9,407,969; and 9,794,621, respectively, the '220 Patent, the '945 Patent, the '339 Patent, the '969 Patent and the '621 Patent. Each of the '945, '339, and '969 patents are continuations of the '220 Patent. The '621 Patent is a continuation of the '969 Patent.

2 In light of this holding, the Court need not reach, and therefore does not reach, the issue of whether the terms "combiner unit" and "combiner circuit", as used in '220 Patent claims 1, 13, and 17; '945 Patent claims 1-10, 12, and 18; '339 Patent claims 1-17, 19, 20; and '969 Patent claims 1, 13, and 17 are indefinite. [See TVnGO's Post-Hearing Brief, Dkt No. 75, p. 3]

3 At the claim construction hearing, TVnGO explained, by way of example, that the icon could take the form of a commonly recognized logo, such as the Netflix logo. [Transcript p. 60, 95, 100]

4 The term "special overlay activation signal" appears in the '954 and '621 Patents, however the parties make no separate, independent arguments with respect to the word "special." Thus, the parties' arguments, and the Court's analysis, applies equally to both "overlay activation signal" and "special overlay activation signal."

5 See also Docket Entries 1-1 ('220 Patent), 1-2 ('945 Patent), 1-3 ('339 Patent), 1-4 ('969 Patent), and 1-5 ('621 Patent).

6 The parties have stipulated on the record that, for the purposes of the issues addressed herein, the parties' differing formulations of a person skilled in the art ("POSA") have no material impact on claim construction. [Transcript, p. 16-17]

7 TVnGO asserts that the Court should defer its indefiniteness ruling "until TVnGO has had an opportunity to take fact discovery." [Post-hearing brief, Dkt No. 75, p. 3; Supplemental brief, Dkt. 81, p. 9-10] The Court concludes, however, that discovery in this particular case would not be helpful to the Court's legal inquiry given the nature of the claims' indefiniteness. As discussed herein, the claims, as written, contain inherent, irreconcilable inconsistencies. Even if, as LG hypothesized at the claim construction hearing, discovery were to reveal that persons skilled in the art at LG subjectively understood what TVnGO's patents claimed [Transcript, p. 66-67], that evidence could not overcome the legal conclusion that the claims, as drafted, and read in light of the specification and prosecution history, do not inform a POSA, with a reasonable amount of certainty, the scope of the invention.

8 TVnGO does not disagree with these findings. Contrast Phillips, 415 F.3d at 1315 ("the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.") (internal citation and quotation omitted).

9 As discussed infra, this use of overlay activation criterion in the '339 Patent is irreconcilably inconsistent with the '621 Patent insofar as the '621 Patent teaches that an overlay activation signal-- not criterion-- causes the display of overlays.

10 The verb "generate" means to create or produce or bring into existence, whereas the verb "display" means to show or reveal something already in existence. Merriam-Webster Unabridged Dictionary. This Court is mindful of the Federal Circuit's guidance that " 'a general-usage dictionary cannot overcome art-specific evidence of the meaning of a claim term.' " Phillips, 415 F.3d at 1322 (internal citation and quotation omitted). This Court's use of a general-usage dictionary in this circumstance is merely to illustrate the absence of any art-specific evidence to inform the words' meanings. See id. at 1322-23 ("judges ... may [ ] rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.") (internal citation and quotation omitted).

11 TVnGO asserts that "LG's entire 'generate' versus 'display' argument is nothing more than its *characterization* of the claims, divorced from the actual claim language." (Dkt. 78, p. 3)(italics in the brief). However, the failing argument is TVnGO's insistence that "generate" and "display" mean the same thing.

End of Document

© 2022 Thomson Reuters. No claim to original U.S. Government Works.

861 Fed.Appx. 453
This case was not selected for
publication in West's Federal Reporter.
See Fed. Rule of Appellate Procedure 32.1 generally
governing citation of judicial decisions issued on or after
Jan. 1, 2007. See also U.S.Ct. of App. Fed. Cir. Rule 32.1.
United States Court of Appeals, Federal Circuit.

TVNGO LTD. (BVI), Plaintiff-Appellant

v.

LG ELECTRONICS INC., LG Electronics USA, Inc., Defendants-Appellees

2020-1837
|
Decided: June 28, 2021

Synopsis

Background: Holder of patents which claimed methods and devices that made televisions "smart," meaning able to display both television content and internet streaming content, brought action against alleged infringers. The United States District Court for the District of New Jersey, Renée Marie Bumb, J., 2020 WL 1899781, issued a claim-construction opinion concluding that two claim phrases rendered the asserted claims indefinite. Patent holder appealed.

Holdings: The Court of Appeals, Prost, Circuit Judge, held that:

[1] intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," rendered the patent claims invalid for indefiniteness, and

[2] intra-patent inconsistencies between the independent and dependent claims rendered the patent claims invalid for indefiniteness.

Affirmed.

West Headnotes (3)

[1] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the specification and the claims as to the result achieved by the phrases "overlay activation criterion" and "overlay activation signal," in patents for "smart" televisions, rendered the patent claims invalid for indefiniteness; neither phrase had an ordinary meaning in the art, and while the specification used these words to describe activating an already overlaid icon to display the internet protocol (IP) content it represented, the claims appeared to use the disputed phrases with respect to displaying an overlay in the first place, thereby creating confusion as to which reading was correct. 35 U.S.C.A. § 112 (2005).

[2] **Patents** ⇐ Particular products or processes

Intra-patent inconsistencies between the independent and dependent claims, in patents for "smart" televisions, regarding whether an "overlay activation criterion" came from the internet or from a user's premises rendered the patent claims invalid for indefiniteness; while the independent claims indicated that an "overlay activation criterion" was a type of "overlay-enabling digital data" that was provided over the internet and transmitted to the user's premises, the dependent claims stated that "overlay activation criterion" included a user command information, indicating that an "overlay activation criterion" could come from a user's premises via the remote control. 35 U.S.C.A. § 112 (2005).

1 Cases that cite this headnote

[3] **Patents** ⇐ In general; utility

US Patent 8,132,220, US Patent 9,124,945, US Patent 9,392,339, US Patent 9,407,969, US Patent 9,794,621. Invalid.

***454** Appeal from the United States District Court for the District of New Jersey in No. 1:18-cv-10238-RMB-KMW, Judge Renee Marie Bumb.

Attorneys and Law Firms

Charles Cantine, Dunlap Bennett & Ludwig PLLC, New York, NY, argued for plaintiff-appellant.

William R. Peterson, Morgan, Lewis & Bockius LLP, Houston, TX, argued for defendants-appellees. Also represented by Natalie A. Bennett, Washington, DC; Eric Kraeutler, Philadelphia, PA; Jeremy Deane Peterson, PV Law LLP, Washington, DC.

Before Prost*, Schall, and Reyna, Circuit Judges.

Opinion

Prost, Circuit Judge.

TVnGO Ltd. (BVI) ("TVnGO") appeals a final patentinvalidity judgment by the U.S. District Court for the District of New Jersey. We agree that the patent claims TVnGO asserts against LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, "LGE") are indefinite under 35 U.S.C. § 112, paragraph 2.[1] We therefore affirm.

Background

I

TVnGO owns U.S. Patent Nos. 8,132,220 ("the '220 patent"), 9,124,945 ("the '945 patent"), 9,392,339 ("the '339 patent"), 9,407,969 ("the '969 patent"), and 9,794,621 ("the '621 patent"), which share a specification and drawings.[2] The patents relate to providing "a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site." '220 patent col. 2 ll. 20–22. Figure 1, for example, depicts a "TV-Internet Integration Box" with inputs from a cable box and the internet, and an output to a television:

***455**

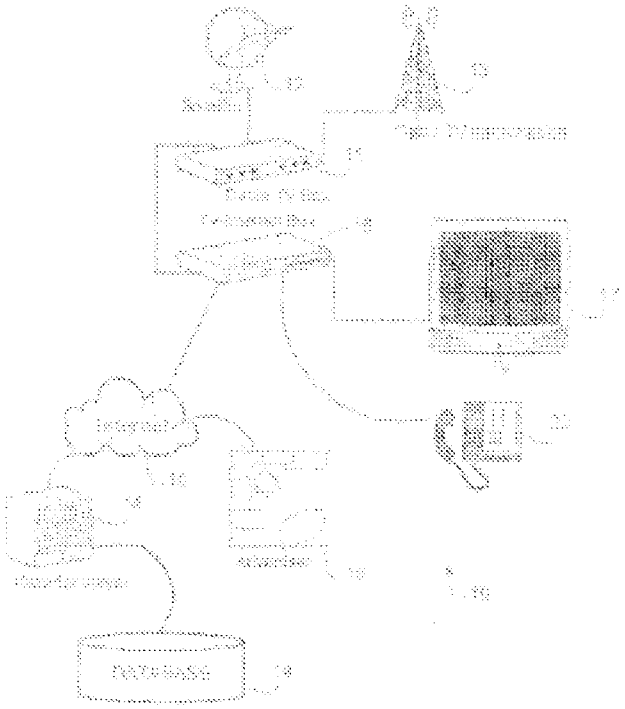


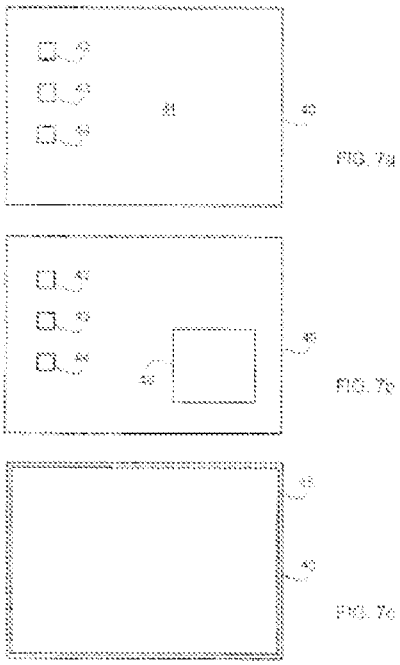
FIG. 1

Id. at Fig. 1.

This system can be influenced in various ways. An advertiser may specify conditions for displaying advertisements, *id.* at col. 3 ll. 59–66, an IP-content provider may store "calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises," *id.* at col. 4 ll. 9–13, and a subscriber may select "what kind of IP content" he or she "wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed," *id.* at col. 4 ll. 21–24. The specification further describes a remote control, *id.* at col. 7 ll. 7–50, that can be programmed according to the embodiment of Figures 7a–c:

***456**

Samsung
Ex. 1031 - Page 119



Id. at Fig. 7a–c.

Figure 7a "shows the default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40," as well as "IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site of known address." *Id.* at col. 7 ll. 29–35. In TVnGO's view, an icon "could take the form of a commonly recognized logo, such as the Netflix logo." *TVnGO Ltd. (BVI) v. LG Elecs., Inc.*, 2020 WL 1899781, at *1 n.3 (D.N.J. Apr. 17, 2020). Figure 7b shows that, upon "pressing the key on the remote control unit 30 that corresponds to the icon 42, the IP content corresponding thereto is displayed within a small window 45." '220 patent col. 7 ll. 35–37. At this point, "[t]he icons 42, 43 and 44 remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit 30." *Id.* at col. 7 ll. 39–42. "On pressing a key a second time in succession, the IP content is re-sized so that its window 45 occupies substantially the whole area of the screen," as shown in Figure 7c. *Id.* at col. 7 ll. 42–44. "On pressing the key a third time in succession, the situation reverts to the default." *Id.* at col. 7 ll. 44–46. "Thus, each key operates as a three-way toggle that switches between three different display modes." *Id.* at col. 7 ll. 48–50.

II

TVnGO alleges that LGE's "Smart TVs" infringe the asserted patents, which it describes as generally directed to "methods and devices that make televisions 'smart.' " J.A. 103–04 (Complaint). After a *Markman* hearing, pre-and post-hearing briefing, and supplemental briefing, the district court issued a claim-construction opinion concluding that the two claim phrases at issue here render the asserted claims indefinite under § 112, paragraph 2. *TVnGO*, 2020 WL 1899781, at *7. In the district court's view, these phrases present "irreconcilable inconsistencies" within and across the asserted patents ("intra-" and "inter-patent" inconsistencies, respectively). *Id.* at *3. "Try as it might," the district court could not "construe the claims with any confidence." *Id.* at *4. Accordingly, the court ***457** held the asserted claims invalid. J.A. 18.[3] TVnGO appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

Discussion

"[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909, 134 S.Ct. 2120, 189 L.Ed.2d 37 (2014) (cleaned up). Accordingly, "[t]he Patent Act requires that a patent specification 'conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as [the] invention.' " *Id.* at 901, 134 S.Ct. 2120 (second alteration in original) (quoting 35 U.S.C. § 112, para. 2). Patent claims are indefinite if they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.*

"In the face of an allegation of indefiniteness, general principles of claim construction apply." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010)). The words of a claim "are generally given their ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). "[C]laims are to be read in light of the patent's specification and prosecution history." *Nautilus*, 572 U.S. at 908, 134 S.Ct. 2120.

Whether a claim is indefinite under 35 U.S.C. § 112 is ultimately a legal conclusion that we review de novo. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1228 (Fed. Cir. 2016). "Any fact critical to a holding on indefiniteness ... must be proven by the challenger by clear

and convincing evidence." *Id.* (alteration in original) (quoting *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003)). "If indefiniteness can be determined based solely on intrinsic evidence, our review is de novo." *Id.* Here, the district court relied on "a review of the claim terms, the specifications, and the prosecution histories" and declined to rely on TVnGO's expert testimony because it had "no support" in the patents. *TVnGO*, 2020 WL 1899781, at *6–7. Therefore, our review is de novo.

Two phrases are at issue here: "overlay activation criterion" and "overlay activation signal."[4] In the claims, these phrases relate generally to producing overlays (e.g., in Figures 7a–c above). *TVnGO*, 2020 WL 1899781, at *1. But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district court. Before addressing those inconsistencies, however, we first highlight the lack of intrinsic evidence in this case as to the meanings of these phrases.

For starters, the parties agree that neither "overlay activation criterion" nor "overlay activation signal" has an ordinary meaning in the art. Appellees' Br. 15; Reply Br. 13; *see TVnGO*, 2020 WL 1899781, at *3 & n.8. Instead, TVnGO contends that a skilled artisan would understand the disputed ***458** phrases by stitching together their constituent words.[5] Reply Br. 2 ("[T]he terms – "overlay," "activation," "criterion," and "signal" – are each easily understood, plain English words."); Oral Arg. at 2:24–46 (arguing that "overlay has a meaning, criterion has a meaning, signal has a meaning, activation has a meaning").[6] Here, we are unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean.

The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification, as both were added to the claims during prosecution. And the "limited information" provided by the prosecution history isn't enough to provide reasonable certainty here either. *TVnGO*, 2020 WL 1899781, at *6. Like the district court, we are unconvinced that the disputed phrases "are far from indefinite" merely because they were "added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed." Appellant's Br. 10; *see Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1380 (Fed. Cir. 2017). This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below as to the '339, '945, and '621 patents (discussed in Section I), and the '220 and '969 patents (discussed in Section II).

I

[1] We turn now to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '339, '934, and '621 patents: an inconsistency between the specification and the claims as to the result achieved by an "overlay activation criterion" or "overlay activation signal." Specifically, beyond its failure to mention the disputed phrases, the specification's use of the words "activates" and "activating" injects further uncertainty. While the specification uses these words to describe activating an already overlaid icon to display the IP content it represents, the claims appear to use the disputed phrases with respect to displaying an overlay in the first place—creating confusion as to which reading is correct. On the one hand, the specification states that "pressing on a specific key *activates* the displayed icon," '220 patent col. 7 ll. 19–22 (emphasis added), and references "the appropriate keys or button for *activating* each icon," *id.* at col. 7 ll. 24–25 (emphasis added). The claims, however, point in a different direction. With respect to the "criterion" term, '339 patent claims 1 and 15 recite "respond[ing] to an overlay activation criterion to cause the display screen to display the overlays." With respect to the "signal" term, '945 patent claims 1 and 12 state that the result of processing the "overlay activation signal" is "generating display drive signals causing the TV screen to display the overlays," and '621 patent claim 1 recites "generating display drive signals that cause the TV screen to display the one or more overlays."

TVnGO responds that the disputed terms cover both displaying an initial overlay and displaying IP material. *E.g.*, Reply Br. 26. But we are not persuaded that this suggestion clears up the uncertainty, as it could also be the case that one or the other of these options is right. Even if it may be possible to "ascribe some meaning" to the disputed limitation, as TVnGO's ***459** reading attempts, more is required: one of ordinary skill must have reasonable certainty. *Nautilus*, 572 U.S. at 911, 134 S.Ct. 2120. Here, a person of ordinary skill would encounter two claim phrases without an ordinary meaning in the art. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1345 (Fed. Cir. 2015) (indefinite term had no "plain meaning to one of skill in the art"). Upon consulting the specification, he or she would not find those phrases. *See id.* at 1344 (indefinite term not defined in specification);

Infinity Comput. Prods., Inc. v. Oki Data Ams., Inc., 987 F.3d 1053, 1056 (Fed. Cir. 2021) (indefinite term absent from specification). And when attempting to glean their meaning from the patent's use of "activates" and "activating," he or she would find that "the patents teach two different results"—i.e., display of IP content associated with an already displayed overlay versus display of an overlay in the first place—without reasonable certainty as to which reading is correct. *TVnGO*, 2020 WL 1899781, at *3. The asserted '339, '945, and '621 patent claims are therefore indefinite.

II

[2] We turn next to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '220 and '969 patents. This is an inconsistency between the independent and dependent claims regarding whether an "overlay activation criterion" comes from the internet or from a user's premises. On the one hand, the independent claims indicate that an "overlay activation criterion" is a type of "overlay-enabling digital data" that is provided "over the Internet" and "transmitted to the user's premises." '220 patent claims 1, 13; '969 patent claims 1, 13. But the dependent claims, on the other hand, state that "said overlay activation criterion includes ... a user command information," indicating that an "overlay activation criterion" can come from a user's premises via the remote control. '220 patent claims 9, 20; '969 patent claims 9, 20. As the district court explained, "the intrinsic evidence presents ... irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet—i.e., from the user's premises." *TVnGO*, 2020 WL 1899781, at *3.

For its part, TVnGO asserts that an overlay activation criterion "comes from the Internet," Reply Br. 3, arguing that, although " 'user commands' ... come from a user, not the Internet," "user command *information*" comes from the internet. Appellant's Br. 20; *see also* Reply Br. 19 ("There is no dispute that a 'user command' comes from a user."). This distinction lacks intrinsic support. Rather, the specification uses the word "command" only once, and in relation to the infrared (IR) remote control. '220 patent col. 7 ll. 2–3 ("An IR receiver 28 is adapted to receive IR commands from a remote control unit."). And when other dependent claims use "command," they similarly recite "receiving a command from a user at said user premises." *Id.* at claims 3, 15; '969 patent claims 3, 15. Accordingly, one of ordinary skill would lack reasonable certainty as to the source of an "overlay activation criterion"—whether the internet or a user's premises.

TVnGO argues in the alternative that this alleged inconsistency is better characterized as an allegation that the dependent claims are invalid for sweeping more broadly than the independent claims. *See* 35 U.S.C. § 112, para. 4. TVnGO misses the mark. The issue is not breadth of the dependent claims but their use of the disputed phrase in a way that contradicts the independent claims. The dependent claims ***460** state that "*said overlay activation criterion* includes ... a user command information," which conflicts with the independent claim's use of this same phrase. '220 patent claims 9, 20 (emphasis added); '969 patent claims 9, 20 (same). That prevents reasonable certainty.

Further, merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in "[o]ther claims of the patent in question," which "can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that. The asserted '220 and '969 patent claims are therefore indefinite.

Conclusion

The district court also relied on inter-patent inconsistencies. *TVnGO*, 2020 WL 1899781, at *4–6. We find it unnecessary to reach those, as the intra-patent grounds discussed above are sufficient to establish indefiniteness. We have considered TVnGO's remaining arguments and find them unpersuasive. The district court correctly concluded that the asserted claims are invalid for indefiniteness. We affirm.

AFFIRMED

All Citations

861 Fed.Appx. 453

Samsung
Ex. 1031 - Page 122

Footnotes

* Circuit Judge Sharon Prost vacated the position of Chief Judge on May 21, 2021.

1 The America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284, effective September 16, 2012, designated § 112, paragraph 2 as § 112(b). These patents stem from an application filed in 2005, so we refer to pre-AIA § 112.

2 For simplicity, all citations to the shared specification are to the '220 patent.

3 The claims are: '220 patent claims 1, 9–10, 13, 17, and 20; '945 patent claims 1, 4, 8, 9, 12, 15, 19, and 21; '696 patent claims 1, 9–10, 13, 17, and 20; '339 patent claims 1, 4–7, 12–15, and 18; and '621 patent claims 1, 4, 9, and 11.

4 The district court's analysis as to "overlay activation signal" applied equally to the phrase "special overlay activation signal" appearing in the '945 and '621 patents. *TVnGO*, 2020 WL 1899781, at *2 n.4.

5 At the district court, TVnGO contended that no construction was necessary and in the alternative proposed constructions which, LGE notes, expanded in response to the inconsistencies LGE raised. *See* Appellees' Br. 23–28.

6 No. 20-1837, http://www.cafc.uscourts.gov/oral-argument-recordings.

End of Document

© 2022 Thomson Reuters. No claim to original U.S. Government Works.

2019 WL 2223672
Only the Westlaw citation is currently available.
United States District Court, D. New Jersey,
Camden Vicinage.

TVNGO LTD. (BVI), Plaintiff,

v.

LG ELECTRONICS, INC. and LG Electronics U.S.A., Inc., Defendants.

Civil No. 18-10238 (RMB/KMW)
|
Signed 05/23/2019

Attorneys and Law Firms

SANDELANDS EYET LLP, By: Matthew T. Eyet, Esq., 1545 U.S. Highway 206, Suite 304, Bedminster, New Jersey 07921 and KING & SPALDING LLP, By: Charles E. Cantine, Esq., Joseph Diamante, Esq., Timothy H. Caine, Esq., 1185 Avenue of the Americas, 35th Floor, New York, New York 10036, Counsel for Plaintiff.

WALSH PIZZI O'REILLY FALANGA LLP, By: Liza M. Walsh, Esq., Selina M. Ellis, Esq., One Riverfront Plaza, 1037 Raymond Boulevard, Suite 600, Newark, New Jersey 07102 and MORGAN, LEWIS & BOCKIUS LLP, By: Natalie Bennett, Esq., Collin W. Park, Esq., Eric Kraeutler, Esq., Ghee J. Lee, Esq., 1111 Pennsylvania Avenue, NW, Washington, D.C. 20004-2541, Counsel for Defendants.

OPINION

Renée Marie Bumb, U.S.D.J.

***1** In this patent infringement suit, Plaintiff TVnGO Ltd. (BVI) asserts that Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, "LG"), are infringing five of TVnGO's patents[1] which claim methods and devices that make televisions "smart"-- i.e., able to display both television content and internet streaming content. LG asserts that the claims of all five patents are unenforceable based on the doctrine of inequitable conduct. LG makes this assertion in both an affirmative defense and a counterclaim.[2] Before the Court is TVnGO's Motion to Dismiss the counterclaim pursuant to Fed. R. Civ. P. 12(b)(6) / Motion to Strike the affirmative defense pursuant to Fed. R. Civ. P. 12(f). For the reasons stated herein, the motion will be denied.

I.

LG's inequitable conduct theory is based on alleged failures to disclose-- or in some instances, with respect to the '220 and '621 patents,[3] alleged failures to *properly* disclose-- prior art to the USPTO during the prosecution of the applications that resulted in the Patents-in-Suit. The prior art is: (1) Japanese Patent Publication No. JP2003-018575 ("the '575 Publication") and (2) additional references disclosing the same subject matter of the European counterpart to the Patents-in-Suit ("the EP Publications").[4]

A. The '220 patent prosecution

The application that would result in the issuance of the '220 patent[5] was filed on July 6, 2007, and the '220 patent issued on March 6, 2012. (TAD ¶¶ 19, 24) LG asserts that at no time during this prosecution did TVnGO's prosecuting attorneys, Mr. Klima and Mr. Kavrukov (nor anyone else), disclose the EP Publications to the USPTO. (Id. ¶ 38) Further, LG explains why, in its view, this nondisclosure matters. LG asserts that the EP Publications were "materially relevant" "because these references were used as a ground for rejecting the counterpart European patent application" to the Patents-in-Suit. (Id. ¶ 38) LG elaborates, "[h]ad the USPTO received and considered the EP Publications and the material relevance of the EP Publications to the patentability of the Patents-in-Suit, it would have been evident that at least one independent claim of each of the Patents-in-Suit was invalid," which would have led the USPTO to reject TVnGO's patent application. (Id. ¶ 39)

***2** Somewhat similarly, LG alleges that Mr. Klima "disclosed" the '575 Publication to the USPTO in a manner that effectively prevented the USPTO from considering it. Specifically, LG alleges that

> [o]n December 23, 2011, more than six months after the participants in the prosecution of the ['220 patent] Application became aware of the '575 Publication and after the prosecution of the [ ] Application had already closed, Mr. William L. Klima of the Nath Law Group filed an Information Disclosure Statement ("IDS") in the [ ] Application, listing several references, including the '575 Publication, and enclosing a copy of the '575 Publication

> in Japanese with an English abstract. However, Mr. Klima did not include in the IDS any requisite certification statement under 37 C.F.R. 1.97(e) or any explanation as to the relevance of the listed references, including the '575 Publication, despite the prior knowledge that the '575 Publication was applied by the Japanese Patent Office to reject the Japanese counterpart '930 JP Application.

(TAD ¶ 22)

LG alleges that five days later, the USPTO notified Mr. Klima that the IDS did not comply with the applicable regulation and therefore the information in the IDS "had not been considered." (TAD ¶ 23) LG further alleges that no one sought to correct the deficiency, and thereafter the '220 patent issued on March 6, 2012. (Id. ¶ 24)

LG alleges that the '575 Publication was materially relevant to the '220 patent application because the Japanese Patent Office applied the '575 Publication "in the rejection of the [Japanese] counterpart" to the '220 patent application. (TAD ¶ 24)

B. The '621 patent prosecution

The application that would result in the issuance of the '621 patent was filed on November 25, 2015, and the '621 patent issued on October 17, 2017. (TAD ¶¶ 27, 29)

With respect to the EP Publications, LG alleges they were disclosed in an IDS filed with the USPTO on January 26, 2017. (TAD ¶ 38) LG does not allege that there was any problem with this particular IDS filed by Mr. Kavrukov in this particular prosecution, which was last in the chronological order of the applications at issue.

Somewhat similarly, with respect to the '575 Publication, LG alleges the '575 Publication was also disclosed in an IDS filed by Mr. Kavrukov on January 26, 2017. (TAD ¶ 28) However, LG alleges that the IDS merely "listed the '575 Publication but did not provide information regarding the material relevance of the '575 Publication to the patentability of the '621 patent." (Id.)

Because the '621 patent is alleged to be "a continuation of the '969 Patent" which patent is, in turn, allegedly a continuation of the '220 patent (TAD ¶ 19), LG asserts that the EP Publications and the '575 Publication are materially relevant to the '621 patent application in the same way that those references are allegedly materially relevant to the '220 patent application. (See Id. ¶¶ 33, 41)

C. The prosecutions of the other Patents-in-Suit

LG alleges that neither the EP Publications nor the '575 Publication were disclosed at all during the prosecutions of the applications for the '945, '339 and '969 patents. (TAD ¶¶ 25, 38) Because the these patents are each alleged to be continuations of the '220 patent (Id. ¶ 19), LG asserts that the EP Publications and the '575 Publication are materially relevant in the same way that those references are allegedly materially relevant to the '220 patent application. (See Id. ¶¶ 33, 41)

II.

***3** Fed. R. Civ. P. 12(b)(6) provides in relevant part, "a party may assert the following defenses by motion: ... (6) failure to state a claim upon which relief can be granted."

Similarly, Fed. R. Civ. P. 12(f) provides in relevant part, "[t]he Court may strike from a pleading an insufficient defense."[6]

A counterclaim or affirmative defense of inequitable conduct sounds in fraud and therefore is subject to the heightened pleading standard of Fed. R. Civ. P. 9(b). " 'Whether inequitable conduct has been pleaded with particularity under Rule 9(b) is a question governed by Federal Circuit law.' " Sanders v. The Mosaic Co., 418 F. App'x 914, 918 (Fed. Cir. 2011) (quoting Exergen Corp. v. Wal-Mart Stores, Inc., 575 F.3d 1312, 1318 (Fed. Cir. 2009)). "To plead inequitable conduct, 'the pleading must identify the specific who, what, when, where, and how of the material misrepresentation or omission committed before the PTO.' " Id. (quoting Exergen).

III.

"A charge of inequitable conduct based on a failure to disclose will survive a motion to dismiss only if the plaintiff's complaint recites facts from which the court may reasonably infer that a specific individual both knew of invalidating information that was withheld from the PTO and withheld that information with a specific intent to deceive the PTO." Delano Farms Co. v. California Table Grape Comm'n, 655 F.3d 1337, 1350 (Fed. Cir. 2011) (citing Exergen, 575 F.3d at 1318, 1330 and Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276 (Fed. Cir. 2011) (en banc)).

LG states its inequitable conduct theory thusly: "the public record regarding [TVnGO's] dealings with the [USPTO] and foreign patent offices [reveals] a pattern of selectively withholding prior art or 'disclosing' the prior art in a non-compliant way that [TVnGO] knew would shield the reference from consideration." (Opposition Brief, Dkt 25, p. 1) According to LG, it is this pattern-- demonstrated over the span of all five patent prosecutions at issue-- that supports a reasonable inference that Mr. Klima and Mr. Kavrukov had the requisite intent to deceive the USPTO. (Id. p. 16-17)

TVnGO asserts that LG's inequitable conduct claim is insufficiently particularized and therefore fails as a matter of law. Each of TVnGO's arguments is addressed in turn.

A. Materiality

First, TVnGO argues that "LG makes conclusory allegations that references are material merely because they were identified in foreign patent prosecutions." (Moving Brief, Dkt 23-1, p. 10; Reply Brief, Dkt 26, p. 2, 6) This argument misstates the allegations of LG's Answer and Counterclaim. LG does not allege that references were merely *identified* in foreign patent prosecutions. Rather, LG specifically alleges that both the EP Publications and the '575 Publication were the basis for *rejecting* claims in the foreign patent applications. (TAD ¶¶ 20, 24, 25, 35-36, 38) As LG explains, the alleged facts that "the '575 [Publication] and the [EP Publications] [ ] persuaded foreign patent offices to question the novelty of the claimed subject matter" support a reasonable conclusion that those references were material. (Opposition Brief, Dkt 25, p. 19, 21) That is, the factual allegations support a conclusion "that the PTO examiner in the United States would have considered the [prior art] as material references" because the examiners in Europe and Japan did. (Id.)

***4** As LG persuasively observes, "the [Manual of Patent Examining Procedure] bolsters the inference of materiality." (Opposition Brief, Dkt 25, p. 21) The MPEP states, "[t]he inference that such prior art or other information is material is especially strong where it has been used in rejecting the same or similar claims in the foreign application." MPEP § 2001.06(a).[7] TVnGO does not directly address this argument in its reply brief. Rather, it asserts that LG has not sufficiently pleaded materiality because it has not provided a "substantive analysis" of how the '575 Publication and the EP Publications affect each claim of the Patents-in-Suit. (Reply Brief, Dkt 26, p. 7) TVnGO, however, provides no legal support for its argument which, if accepted, would impose a higher burden of pleading than Dealno Farms and Exergen require.[8] At the pleadings stage, TVnGO need only plead "facts from which the court may reasonably infer" that the omitted information was material. Delano Farms, 655 F.3d at 1350 (citing Exergen). As the MPEP explains, the facts LG alleges strongly support the reasonable inference that the '575 Publication and the EP Publications were material to the prosecutions of the Patents-in-Suit. Accordingly, the Court holds that LG has sufficiently pleaded facts supporting a reasonable inference of materiality as to the '575 Publication and the EP Publications.

B. Specific Individuals

Next, TVnGO argues that LG does not identify "which specific individuals it contends had specific intent to commit fraud on the PTO." (Reply Brief, Dkt 26, p. 5) While some paragraphs of LG's Thirteenth Affirmative Defense are exceedingly vague,[9] other allegations are sufficiently particularized. The pleading specifically identifies Mr. Klima and Mr. Kavrukov and describes what they allegedly did, and failed to do, during the prosecutions of the Patents-in-Suit. For example, LG alleges that Mr. Klima untimely filed the non-compliant IDS in the '220 patent prosecution, and then failed to act on the USPTO's Notification of Non-Compliant IDS. (TAD ¶¶ 22-24) Similarly, LG alleges that Mr. Kavrukov filed an incomplete IDS in the '621 patent prosecution. (Id. ¶ 28)

Accordingly, the Court holds that LG's pleading with respect to Mr. Klima and Mr. Kavrukov[10] is sufficiently particularized.

C. Intent

Lastly, TVnGo argues that "[a]ny inference that someone at TVnGO intentionally tried to deceive the PTO based on these [alleged] facts would be unreasonable[11] because the references were in fact disclosed." (Moving Brief, Dkt 23-1, p. 18; see also Reply Brief, Dkt 26, p. 3) Tellingly, however, TVnGO does not address the details of allegedly when or how the references were disclosed. Yet, it is precisely these details that support LG's theory of its case. For example, while LG does, indeed, allege that the EP Publications were fully disclosed to the PTO in a compliant IDS (TAD ¶ 38), the more salient alleged fact is the timing of that disclosure. LG alleges that the EP Publications and their materiality were known to Mr. Klima and Mr. Kavrukov as early as 2011 (Id.

¶ 35), and should have been fully disclosed as prior art in the prosecutions of all five of the Patents-in-Suit, but LG alleges that the EP Publications were not disclosed until 2017, during the prosecution of the last patent at issue, the '621 patent (Id. ¶ 38). Thus, even if the disclosure of the EP Publications in the '621 patent prosecution would preclude a claim of inequitable conduct during the prosecution of the '621 patent,[12] it does not preclude claims of inequitable conduct with regard to the other four Patents-in-Suit.

***5** TVnGO invites the Court to conclude, based solely on the alleged fact that the EP Publications were properly disclosed one out of five times, that no inference of intent to defraud may logically be drawn as to any of the Patents-in-Suit. According to TVnGO, if it had a specific intent to deceive, it would have withheld the reference altogether, rather than disclose it, which would only give "future challengers" a "roadmap" of an invalidity argument. (Moving Brief, Dkt 23-1, p. 19) While this is one possible inference to be drawn from the alleged facts, it is not the only inference. An equally plausible inference is that an intentionally delayed disclosure during the last patent prosecution is not inconsistent with a specific intent to deceive in earlier prosecutions.[13] Thus, the Court disagrees that the allegations concerning disclosure of the EP Publications during the '621 patent prosecution preclude all inferences of specific intent to deceive in other earlier related prosecutions.

Moreover, LG alleges that the '575 Publication was never *properly* disclosed in any prosecution-- another detail TVnGO's "disclosure" argument ignores. TVnGO, through Mr. Klima and Mr. Kavrukov, should have disclosed the '575 Publication on five separate occasions (i.e., during the prosecution of each Patent-in-Suit) yet allegedly completely failed to disclose during the second, third, and fourth opportunities to do so. (TAD ¶¶ 25-38) During the first and fifth opportunities, LG alleges that the '575 Publication was improperly disclosed (Id. ¶¶ 22, 28) such that at no time during the prosecutions of any of the Patents-in-Suit did the USPTO have before it all of the information materially relevant to the patent prosecutions.

Accordingly, the Court holds that LG has pleaded sufficient facts to support a reasonable inference of specific intent to deceive during the prosecutions of all five Patents-in-Suit.

IV.

For the above-stated reasons, TVnGO's motion will be denied. An Order accompanies this Opinion.

All Citations

Not Reported in Fed. Supp., 2019 WL 2223672

Footnotes

1 The Patents-in-Suit are U.S. Patent Nos. 8,132,220; 9,124,945; 9,392,339; 9,407,969; and 9,794,621, respectively, the '220 patent, the '946 patent, the '339 patent, the '969 patent and the '621 patent. "Each of the '945, '339, and '969 patents are continuations of the '220 patent. The '621 patent is a continuation of the '969 patent." (Thirteenth Affirmative Defense, "TAD", ¶ 19)

2 The affirmative defense and counterclaim are entirely coextensive. See Counterclaim Count 11 ¶ 48 ("LGE repeats and re-alleges paragraphs 13-41 of its Thirteenth Affirmative Defense (Inequitable Conduct) to TVnGO's Complaint as fully set forth herein.").

3 Of the Patents-in-Suit, the '220 patent was the first to issue and the '621 patent was the last to issue. (TAD ¶¶ 21, 29)

4 See TAD ¶¶ 14, 17, 35-36. TVnGO does not dispute that these two items are, indeed, prior art, as LG alleges.

5 U.S. Application No. 11/794,825 (TAD ¶ 19).

6 Rule 12 expressly states that "[a] motion under this rule may be joined with any other motion allowed by this rule." Fed. R. Civ. P. 12(g)(1). Joining a 12(b)(6) motion with a 12(f) motion is particularly appropriate in this case where the counterclaim challenged by the 12(b)(6) motion is identical to the affirmative defense challenged by the 12(f) motion.

7 See also, LNP Eng'g Plastics, Inc. v. Miller Waste Mills, Inc., 2000 WL 33341185, at *10 (D. Del. Aug. 8, 2000) ("Materiality of an uncited prior art reference can be shown by evidence that the applicant cited the prior art in related foreign

prosecutions. If the uncited prior art provided a basis for a foreign patent office's rejection of counterpart application, then the inference of materiality is especially strong.") (citing MPEP § 2001.06(a)) aff'd 275 F.3d 1347 (Fed. Cir. 2001) (quoting MPEP § 2001.06(a)); see generally, Molins PLC v. Textron, Inc., 48 F.3d 1172, 1180 (Fed. Cir. 1995) ("While the MPEP does not have the force of law, it is entitled to judicial notice as an official interpretation of statutes or regulations as long as it is not in conflict therewith.").

8 The Court also questions how a meaningful claim analysis could possibly be done before the Court has construed the claims of the Patents-in-Suit.

9 See, e.g., TAD ¶ 15 ("one or more of the participants in the prosecution of the applications that led to the Patents-in-Suit failed to satisfy their duty of disclosure with respect to the Patents-in-Suit."); see also infra. n. 10.

10 In its Opposition Brief, LG argues that "[a]t the very least, LGE alleges that Messrs. Klima and Kavrukov and/or Ms. Hopkins (prosecuting attorneys) and Mr. Yaakov Merlin (named inventor of the Patents-in-Suit) have committed fraud on the Patent Office." (Opposition Brief, Dkt 25, p. 9) The Thirteenth Affirmative Defense, as currently pleaded, does not allege with any specificity what Ms. Hopkins or the named inventor did or did not do during the prosecutions of the Patents-in-Suit. In the event that discovery reveals additional relevant information as to these individuals' participation in the asserted inequitable conduct, LG may file, if appropriate, a Motion to Amend.

11 "[A]n inference of deceptive intent must be reasonable and drawn from a pleading's allegations of underlying fact to satisfy the Federal Rules of Civil Procedure's heightened pleading requirement." Exergen, 575 F.3d at 1329 n.5.

12 The Court does not rule on this issue at this time, because, as explained next, LG has alleged sufficient facts to support a claim of inequitable conduct during the prosecution of the '621 patent based on the alleged inadequate disclosure of the '575 Publication in the '621 patent prosecution.

13 For example, LG suggests that failing to disclose the EP Publications during the '220 patent prosecution could have benefitted TVnGO independent of that reference's impact on the '621 patent. (See Opposition Brief, Dkt 25, p. 22)

End of Document

© 2022 Thomson Reuters. No claim to original U.S. Government Works.

Citing References (14)

Treatment	Title	Date	Type	Depth	Headnote(s)
Examined by	**1.** TVnGO Ltd. v. LG Electronics, Inc. 2020 WL 1899781, *1+ , D.N.J.	Apr. 17, 2020	Case		—
Discussed by	**2.** TVnGO Ltd. (BVI) v. LG Electronics, Inc. 2019 WL 2223672, *1+ , D.N.J.	May 23, 2019	Case		—
Discussed by	**3.** Defendants LG Electronics Inc. and LG Electronics U.S.A., Inc.'s Opening Claim Construction Brief TVNGO LTD. (BVI), Plaintiff, v. LG ELECTRONICS INC., and LG Electronics U.S.A., Inc., Defendants. 2019 WL 6251822, *1+ , D.N.J. (Trial Motion, Memorandum and Affidavit)	Sep. 23, 2019	Motion		—
Discussed by	**4.** Joint Claim Construction and Prehearing Statement Pursuant to Local Patent Rule 4.3 TVNGO LTD. (BVI), Plaintiff, v. LG ELECTRONICS INC. and LG Electronics U.S.A., Inc., Defendants. 2019 WL 5606672, *1+ , D.N.J. (Trial Filing)	Aug. 07, 2019	Filing		—
Mentioned by	**5.** Method and apparatus for facilitating toggling between internet and TV broadcasts LitAlert P2018-23-46	June 06, 2018	Lit Alert		—
Mentioned by	**6.** Method and apparatus for facilitating toggling between internet and TV broadcasts LitAlert P2018-25-38	June 06, 2018	Lit Alert		—
Mentioned by	**7.** Reply Brief of Appellant TVNGO LTD. (BVI), Plaintiff - Appellant, v. LG ELECTRONICS, INC., LG Electronics U.S.A., Inc., Defendants - Appellees. 2020 WL 6559011, *1+ , Fed.Cir. (Appellate Brief)	Nov. 03, 2020	Brief		—
—	**8.** DATA BROADCAST FACILITATION METHOD INVOLVES INTERACTING USER WITH IMAGE FOR REDIRECTING TO DIGITAL DATA COMMUNICATION NETWORK AND DISPLAYING PROGRAM CONTENT BROADCAST IN PORTION OF TV SET Out Of Pas. DWPI 2006-558784+	Jan. 11, 2005	DWPI	—	—
—	**9.** RF 035417/0667 Out Of Pas.	Apr. 15, 2015	Assignments	—	—
—	**10.** PatStat 9407969	Oct. 11, 2016	Patent Status Files	—	—
—	**13.** METHOD OF DISPLAYING INTERNET SIGNAL ON TV Out Of Pas. US PAT 9794621 , U.S. PTO Utility	Oct. 17, 2017	Patents	—	—
—	**14.** METHOD OF DISPLAYING INTERNET SIGNAL ON TV Out Of Pas. US PAT APP 20170302993 , U.S. PTO Application	Oct. 19, 2017	Patents	—	—
—	**15.** PATENT-FED. CIR.: TV-INTERNET INTEGRATION BOX PATENT CLAIMS FOR SMART TV INVALID AS INDEFINITE	2021	Other Secondary Source	—	—

WESTLAW © 2022 Thomson Reuters. No claim to original U.S. Government Works.

Treatment	Title	Date	Type	Depth	Headnote(s)
—	**16.** PATENT-D.N.J.: CLAIMS OF SMART TV PATENTS WERE TOO INDEFINITE TO CONSTRUE	2020	Other Secondary Source	—	—

WESTLAW © 2022 Thomson Reuters. No claim to original U.S. Government Works.

LexisNexis

User Name: Renee Preston
Date and Time: Tuesday, July 26, 2022 9:28:00 AM EDT
Job Number: 176013948

Documents (22)

1. *Exhibit D*
Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

2. *MODIFIED ENTRY: OPENING BRIEF FILED for Appellant TVnGO Ltd. (BVI). Number of Pages: 37. Service: 07/27/2020 by email. Unless ordered otherwise, any responsive deadline runs from the date of service of this brief. See Fed. Cir. R. 31. [7102391--[Edited 08/03/2020 by LMN - compliance review complete] (Charles Cantine)*
Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

3. *ANSWER to Counterclaim by TVnGO LTD. (BVI).(EYET, MATTHEW) (Entered: 09/06/2019)*
Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

4. *COMPLAINT against LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC. (Filing and Admin fee $ 400 receipt number 0312-8792992) with JURY DEMAND, filed by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G, # 8 Exhibit H, # 9 Exhibit I, # 10 Exhibit J, # 11 Exhibit K, # 12 Exhibit L, # 13 Exhibit M, # 14 Exhibit N, # 15 Exhibit O, # 16 Civil Cover Sheet)(EYET, MATTHEW) (Entered: 06/06/2018)*
Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

5. *COMPLAINT against LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC. (Filing and Admin fee $ 400 receipt number 0312-8792992) with JURY DEMAND, filed by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G, # 8 Exhibit H, # 9 Exhibit I, # 10 Exhibit J, # 11 Exhibit K, # 12 Exhibit L, # 13 Exhibit M, # 14 Exhibit N, # 15 Exhibit O, # 16 Civil Cover Sheet)(EYET, MATTHEW) (Entered: 06/06/2018)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

6. *COMPLAINT against LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC. (Filing and Admin fee $ 400 receipt number 0312-8792992) with JURY DEMAND, filed by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G, # 8 Exhibit H, # 9 Exhibit I, # 10 Exhibit J, # 11 Exhibit K, # 12 Exhibit L, # 13 Exhibit M, # 14 Exhibit N, # 15 Exhibit O, # 16 Civil Cover Sheet)(EYET, MATTHEW) (Entered: 06/06/2018)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

7. *OPENING BRIEF OF APPELLANT*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

8. *Declaration of Charles E. Cantine*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

9. *OPINION, Signed by Judge Renee Marie Bumb on 4/16/2020. (dmr) (Entered: 04/17/2020)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

LexisNexis | About LexisNexis | Privacy Policy | Terms & Conditions | Copyright © 2022 LexisNexis

Renee Preston

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

10. *OPINION. Signed by Judge Renee Marie Bumb on 5/23/2019. (dmr) (Entered: 05/23/2019)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

11. *USCA for the Federal Circuit OPINION. (js) (Entered: 06/28/2021)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

12. *ANSWER to Complaint with JURY DEMAND., COUNTERCLAIM against TVnGO LTD. (BVI) by LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC. (WALSH, LIZA) (Entered: 09/28/2018)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

13. *BRIEF in Opposition filed by LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC., re 23 MOTION to Dismiss Count Eleven of Defendants' Counterclaims, and Motion to Strike Defendants' Thirteenth Affirmative Defense (Attachments: # 1 Certificate of Service)(WALSH, LIZA) (Entered: 11/05/2018)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

14. *BRIEF IN SUPPORT OF PLAINTIFF'S MOTION TO DISMISS DEFENDANTS' INEQUITABLE CONDUCT COUNTERCLAIM (COUNT ELEVEN) UNDER FED. R. CIV. P. 12(b)(6) AND MOTION TO STRIKE DEFENDANTS' AFFIRMATIVE DEFENSE UNDER FED. R. CIV. P. 12(f)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

LexisNexis | About LexisNexis | Privacy Policy | Terms & Conditions | Copyright © 2022 LexisNexis

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

15. *Declaration of W. LEO HOARTY with Ex. 1*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

16. *DEFENDANTS LG ELECTRONICS INC. AND LG ELECTRONICS U.S.A., INC.'S FIRST AMENDED ANSWER to Complaint with JURY DEMAND , COUNTERCLAIM against TVnGO LTD. (BVI) by LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC..(WALSH, LIZA) (Entered: 09/16/2019)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

17. *MARKMAN OPENING BRIEF BY DEFENDANTS LG ELECTRONICS INC. AND LG ELECTRONICS U.S.A., INC. (Attachments: # 1 Declaration of W. LEO HOARTY with Ex. 1, # 2 Declaration of COLLIN W. PARK, # 3 Exhibit A-M TO PARK DECLARATION)(WALSH, LIZA) (Entered: 09/23/2019)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

18. *MARKMAN OPENING BRIEF BY PLAINTIFF TVnGO LTD. (BVI) (Attachments: # 1 Declaration of Charles E. Cantine, # 2 Exhibit 1 through 9 to Cantine Declaration)(EYET, MATTHEW) (Entered: 09/23/2019)*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

19. *MOTION to Dismiss Count Eleven of Defendants' Counterclaims, and Motion to Strike Defendants' Thirteenth Affirmative Defense by TVnGO LTD. (BVI). Responses due by 11/5/2018 (Attachments: # 1 Brief, # 2 Declaration of Timothy H. Caine, Esq., # 3 Exhibit A, # 4 Exhibit B, # 5 Exhibit C, # 6 Exhibit D, # 7 Exhibit E, # 8 Exhibit F, # 9 Exhibit G, # 10 Exhibit H, # 11 Exhibit I, # 12 Text of Proposed Order, # 13 Certificate of Service)(EYET, MATTHEW) (Entered: 10/19/2018)*

LexisNexis | About LexisNexis | Privacy Policy | Terms & Conditions | Copyright © 2022 LexisNexis

Renee Preston

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

20. *Supplemental Declaration of W. Leo Hoarty*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

21. *Exhibit D*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

22. *Exhibit 1 through 9 to Cantine Declaration*

Client/Matter: -None-

Search Terms: 9407969 or 9,407,969

Search Type: Terms and Connectors

Narrowed by:

Content Type	Narrowed by
Briefs, Pleadings and Motions	-None-

LexisNexis | About LexisNexis | Privacy Policy | Terms & Conditions | Copyright © 2022 LexisNexis

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Complaint

Title

Exhibit D

Click to view PDF document

End of Document

Renee Preston

TVnGO Ltd. (BVI) v. LG Electronics, Inc.

20-1837

US Court of Appeals for the Federal Circuit

May 26, 2020, Filed

Reporter

State: US-DC

Type: Brief

Title

MODIFIED ENTRY: OPENING BRIEF FILED for Appellant TVnGO Ltd. (BVI). Number of Pages: 37. Service: 07/27/2020 by email. Unless ordered otherwise, any responsive deadline runs from the date of service of this brief. See Fed. Cir. R. 31. [710239] --[Edited 08/03/2020 by LMN - compliance review complete] [Charles Cantine]

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Answer to Counterclaim

Title

ANSWER to Counterclaim by TVnGO LTD. (BVI).(EYET, MATTHEW) (Entered: 09/06/2019)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Complaint

Title

COMPLAINT against LG ELECTRONICS, INC.,, LG ELECTRONICS U.S.A., INC. (Filing and Admin fee $ 400 receipt number 0312-8792992) with JURY DEMAND, filed by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G, # 8 Exhibit H, # 9 Exhibit I, # 10 Exhibit J, # 11 Exhibit K, # 12 Exhibit L, # 13 Exhibit M, # 14 Exhibit N, # 15 Exhibit O, # 16 Civil Cover Sheet)(EYET, MATTHEW) (Entered: 06/06/2018)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Complaint

Title

COMPLAINT against LG ELECTRONICS, INC.,, LG ELECTRONICS U.S.A., INC. (Filing and Admin fee $ 400 receipt number 0312-8792992) with JURY DEMAND, filed by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G, # 8 Exhibit H, # 9 Exhibit I, # 10 Exhibit J, # 11 Exhibit K, # 12 Exhibit L, # 13 Exhibit M, # 14 Exhibit N, # 15 Exhibit O, # 16 Civil Cover Sheet)(EYET, MATTHEW) (Entered: 06/06/2018)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi)

2:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Complaint

Title

COMPLAINT against LG ELECTRONICS, INC.,, LG ELECTRONICS U.S.A., INC. (Filing and Admin fee $ 400 receipt number 0312-8792992) with JURY DEMAND, filed by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G, # 8 Exhibit H, # 9 Exhibit I, # 10 Exhibit J, # 11 Exhibit K, # 12 Exhibit L, # 13 Exhibit M, # 14 Exhibit N, # 15 Exhibit O, # 16 Civil Cover Sheet)(EYET, MATTHEW) (Entered: 06/06/2018)

Click to view PDF document

End of Document

Renee Preston

TVNGO LTD. v. LG ELECS., INC.

2020-1837

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

July 27, 2020

Reporter
2020 U.S. FED. CIR. BRIEFS LEXIS 884 *

TVNGO LTD. (BVI), Plaintiff - Appellant, v. LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC., Defendants - Appellees,

Type: Brief

Prior History: ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY. ORIGINATING CASE NO. 1:18-CV-10238-RMB-KMW.

Counsel

Charles Cantine, DUNLAP BENNETT & LUDWIG PLLC, New York, NY, Counsel for Appellant .

Title

OPENING BRIEF OF APPELLANT

Text

CERTIFICATE OF INTEREST **[*1]**

Case Number 20-1837

Short Case Caption TVnGo Ltd. (BVI) v. LG Electronics, Inc. & LG Electronics U.S.A. Inc.

Filing Party/Entity TVnGo Ltd. (BVI)

Instructions: Complete each section of the form. In answering items 2 and 3, be specific as to which represented entities the answers apply; lack of specificity may result in non-compliance. Please enter only one item per box; attach additional pages as needed and check the relevant box. Counsel must immediately file an amended Certificate of Interest if information changes. Fed. Cir. R. 47.4(b).

I certify the following information and any attached sheets are accurate and complete to the best of my knowledge.

Date: **07/27/2020**

Signature: /s/ Charles Cantine

Name: Charles Cantine

1. Represented Entities.
Fed. Cir. R. 47.4(a)(1).

Provide the full names of all entities represented by undersigned counsel in this case.

2. Real Party in Interest.

Renee Preston

Fed. Cir. R. 47.4(a)(2).

Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.

3. Parent Corporations and Stockholders.

Fed. Cir. R. **[*2]** 47.4(a)(3).

Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.

1. Represented Entities.

Fed. Cir. R. 47.4(a)(1).

[] None/Not Applicable

2. Real Party in Interest.

Fed. Cir. R. 47.4(a)(2).

[checkmark] None/Not Applicable

[checkmark] None/Not Applicable

1. Represented Entities.

Fed. Cir. R. 47.4(a)(1).

TVnGo Ltd. (BVI)

2. Real Party in Interest.

Fed. Cir. R. 47.4(a)(2).

[BLANK IN ORIGINAL]

3. Parent Corporations and Stockholders.

Fed. Cir. R. 47.4(a)(3).

[BLANK IN ORIGINAL]

4. Legal Representatives. List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

[] None/Not Applicable [] Additional pages attached

KING & SPALDING LLP: Timothy Harold Caine

SANDELANDS EYET LLP: Matthew T. Eyet

TROUTMAN SANDERS LLP: Charles E. Cantine, Joseph Diamante, and Katharine Harihar

DUNLAP BENNETT & LUDWIG PLLC: Charles E. Cantine **[*3]** and Joseph Diamante

5. Related Cases. Provide the case titles and numbers of any case known to be pending in this court or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. Do not include the originating case number(s) for this case. Fed. Cir. R. 47.4(a)(5). See also Fed. Cir. R. 47.5(b).

[checkmark] None/Not Applicable [] Additional pages attached

Renee Preston

6. Organizational Victims and Bankruptcy Cases. Provide any information required under *Fed. R. App. P. 26.1(b)* (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).

[checkmark] None/Not Applicable [] Additional pages attached

[EDITOR'S NOTE: TEXT WITHIN THESE SYMBOLS [O> <O] IS OVERSTRUCK IN THE SOURCE.]

'220 Patent claims 1, 9, 10, 13, 17, and 20

1. A TV-Internet Integration circuit configured to combine, at a user's premises, TV channel video with Internet Protocol (IP) material selected by the user through overlays displayed at the user's premises in response to an overlay activation signal that the user has selected, said circuit comprising: a TV screen at the user's premises configured **[*4]** to display video in response to display drive signals; a combiner circuit at the user's premises having a first input for receiving the TV channel video, a second input for receiving the IP material, and an output for outputting display drive signals to the TV screen; wherein (i) as received by the combiner circuit at the user's premises, the TV channel video conforms to a TV broadcast format standard, and (ii) a received by the combiner circuit at the user's premises, the IP material conforms to an IP format that is different from the TV broadcast format standard and is received via a path different from that for the TV channel video at least in part; a memory circuit operatively associated with the combiner circuit and configured to store, at the user's premises, plural overlays each associated with respective IP material; said combiner circuit being configured to selectively generate display drive signals causing the TV screen to display the TV channel video received at the first input and, further, to selectively process at the user's premises an overlay activation signal; said combiner circuit being further configured to respond to the processing of the overlay activation signal **[*5]** by obtaining the overlays from the memory circuit and generating display drive signals causing the TV screen to display the overlays; said combiner circuit being still further configured to respond to a user selection of one of the displayed overlays to generate display drive signals causing the TV screen to display the IP material associated with the selected overlay and received at the second input; wherein depending on user selection at the user's premises the TV screen displays, at respective times, the TV channel video received at the first input, the overlays, and the IP material that the user has selected through the displayed overlays.

9. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to cause the screen to display at least one of the overlays in response to a special overlay activation signal from an external source timed relative to an event in the TV channel video displayed on the screen.

10. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to cause the screen to display overlays that point to sources of IP material but not to specific IP material.

13. The TV-Internet Integration **[*6]** circuit of claim 12 in which the display drive signals cause the TV display to display the overlays over a display of the TV Channel video on the TV screen.

17. The TV-Internet Integration circuit of claim 12 including pre-fetching IP material and storing the pre-fetched material in a memory circuit at the user's premises for later display on the screen.

20. The TV-Internet Integration circuit of claim 12 in which the screen displays overlays that point to sources of IP material but not to specific IP material.

'945 Patent claims 1, 4, 8, 9, 12, 15, 19, 21

1. A TV-Internet Integration circuit configured to combine, at a user's premises, TV channel video with Internet Protocol (IP) material selected by the user through overlays displayed at the user's premises in response to an overlay activation signal that the user has selected, said circuit comprising: a TV screen at the user's premises configured to display video in response to display drive signals; a combiner circuit at the user's premises having a first input for receiving the TV channel video, a second input for receiving the IP material, and an output for outputting display drive signals to the TV screen; wherein **[*7]** (i) as received by the combiner circuit at the user's

premises, the TV channel video conforms to a TV broadcast format standard, and (ii) a received by the combiner circuit at the user's premises, the IP material conforms to an IP format standard that is different from the TV broadcast format standard and is received via a path different from that for the TV channel video at least in part; a memory circuit operatively associated with the combiner circuit and configured to store, at the user's premises, plural overlays each associated with respective IP material; said combiner circuit being configured to selectively generate display drive signals causing the TV screen to display the TV channel video received at the first input and, further, to selectively process at the user's premises an overlay activation signal; said combiner circuit being further configured to respond to the processing of the overlay activation signal by obtaining the overlays from the memory circuit and generating display drive signals causing the TV screen to display the overlays; said combiner circuit being still further configured to respond to a user selection of one of the displayed overlays to generate display **[*8]** drive signals causing the TV screen to display the IP material associated with the selected overlay and received at the second input; wherein depending on user selection at the user's premises the TV screen displays, at respective times, the TV channel video received at the first input, the overlays, and the IP material that the user has selected through the displayed overlays.

4. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to generate the overlay activation signal through testing if specified conditions match contents of the memory circuit.

8. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to selectively process at the user's premises an overlay activation signal per input froth the user.

9. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to cause the screen to display at least one of the overlays in response to a special overlay activation signal from an external source timed relative to an event in the TV channel video displayed on the screen.

12. A TV-Internet Integration process combining, at a user's premises, TV channel video with **[*9]** Internet Protocol (IP) material selected by the user through overlays displayed at the user's premises in response to an overlay activation signal that the user has selected, said process comprising: providing a combiner circuit at the user's premises having a first input for receiving the TV channel video, a second input for receiving the IP material, and an output for outputting display drive signals to the TV screen; wherein (i) as received by the combiner circuit at the user's premises, the TV channel video conforms to a TV broadcast format standard, and (ii) as received by the combiner circuit at the user's premises, the IP material conforms to an IP format standard that is different from the TV broadcast format standard and is received via a path different from that for the TV channel video at least in part; storing in a memory circuit at the user's premises, plural overlays each associated with respective IP material; selectively generating display drive signals causing a TV screen to display the TV channel video received at the first input; selectively processing at the user's premises an overlay activation signal; responding to the processing of the overlay activation signal **[*10]** by obtaining the overlays from the memory circuit and generating display drive signals causing the TV screen to display the overlays; responding to a user selection of one of the displayed overlays by causing the combiner circuit to generate display drive signals causing the TV screen to display the IP material associated with the selected overlay and received at the second input; wherein depending on user selection at the user's premises the TV screen displays, at respective times, the TV channel video received in the first input, the overlays, and the IP material thin the user has selected through the displayed overlays.

15. The TV-Internet Integration process of claim 12 in which the overlay activation signal is generated as a function of testing if specified conditions at the user's premises match contents of the memory circuit.

19. The TV-Internet Integration process of claim 12 in which the screen displays at least one of the overlays in response to a special overlay activation signal from an external source timed relative to an event in the TV channel video displayed on the screen.

21. The TV-Internet Integration process of claim 12 in which the step of selectively **[*11]** processing at the user's premises an overlay activation signal comprises processing per input from the user.

'696 Patent claims 1, 9, 10, 13, 17 and 20

Renee Preston

1. A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising: (a) providing a combiner circuit at the user's premises, wherein: the combiner circuit is coupled to a TV set and connected to a separate TV timer box or TV tuner in the TV set, at the user's premises, and the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet, wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and wherein said overlay-enabling digital data includes at least: a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored, an image indicative of the content **[*12]** associated with said overlay-enabling digital data, and an overlay activation criterion; and (b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said activation criterion is met, wherein generating an overlay includes: generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

9. The method according to claim 1, wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.

10. The method according to claim 5, further including: periodically accessing a web server for downloading said overlay-enabling **[*13]** digital data; extracting from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images; retrieving and storing digital content from said web sites; and if the overlay activation criterion is met and a user command that is associated with an image from amongst said one or more second images is identified, displaying the respective image from amongst the second images, accessing the respective web site associated with the displayed image and extracting and buffering content from the website.

13. A TV-Internet Integration circuit for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the TV-Internet Integration Box comprising: a combiner circuit at a user's premises coupled to a separate TV tuner box or TV tuner, wherein the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner, and an Internet data input providing overlay-enabling digital data over the Internet, wherein said video signals and said overlay-enabling **[*14]** digital data are received at the combiner circuit at the user's premises by different resources as mutually distinct and independent inputs, and wherein said overlay-enabling digital data includes at least: a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored; an image indicative of the content associated with said overlay-enabling digital data; and an overlay activation criterion, wherein the combiner circuit is responsive to an overlay activation criterion being met for generating a corresponding overlay, including: generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, and generate a second video display screen including at least a portion which corresponds to said content; and a video output interface, coupled to or integrated within the combiner circuit and configured to be coupled to a video **[*15]** input of said TV set and to display said first display screen or said second video display screen.

17. The TV-internet Integration circuit according to claim 13, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein the combiner circuit is configured to: periodically access a web server for downloading said overlay-enabling digital data; extract from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images; retrieve and store digital content from

said web sites; and if the overlay activation criterion is met, and a user command that is associated with an image from amongst said one or more second images is identified, display the respective image from amongst the second images, access the respective web site associated with the displayed image and extract and buffer content from the website.

20. The TV-Internet Integration circuit according to claim 13, wherein **[*16]** said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.

'339 Patent claims 1, 4-7, 12-15 and 18

1. A TV-Internet Integration circuit configured to combine, at a user's premises, TV channel video with Internet Protocol (IP) material selected by the user through overlays on the TV channel video displayed in response to an overlay activation criterion that the user has selected, said circuit comprising: a combiner circuit at the user's premises having a first input for receiving the TV channel video and a second input for receiving the IP material, and further having an output for outputting the combined video; wherein: the TV channel video conforms to a TV broadcast format standard as received at the combiner circuit; the IP format material, as received at the combiner circuit, conforms to an IP format standard that is different from the TV broadcast format standard and is received at the combiner circuit via a path different from that for the TV channel video at least in part; and the combiner circuit comprises a memory circuit configured to store, at the user's **[*17]** premises, plural overlays each identifying a respective source of IP material; a display screen at the user's premises coupled with the combiner circuit to receive and display the combined video as a screen image; said combiner circuit being further configured to: respond to an overlay activation criterion to cause the display screen to display the overlays as at least a part of the screen image, and respond to an overlay activation signal selected by the user at the user's premises and identifying one of the displayed overlays to cause the screen to display IP format material from the IP source associated with the identified overlay; wherein depending on the user's selection at the user's premises the screen image is at respective times the TV channel video with or without overlays thereon and the IP material that the user has selected through the displayed overlays.

4. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to generate the overlay activation criterion at the user's premises.

5. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to generate the overlay activation criterion at the user's **[*18]** premises by matching material stored in the memory with IP material available at the second input of the combiner circuit.

6. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to respond to the overlay activation criterion by causing the screen to display the overlays on a screen showing the TV channel video.

7. The TV-Internet Integration circuit of claim 1 in which the combiner circuit is configured to respond to the overlay activation criterion by causing the screen to display the overlays in respective windows of the screen while the screen is showing the TV channel video.

12. The TV-Internet Integration circuit of claim 1 including a remote control unit operatively associated with the combiner circuit and configured to respond to user action to generate the overlay activation signal.

13. The TV-Internet Integration circuit of claim 1 including a remote control unit operatively associated with the combiner circuit and configured to respond to user action to generate the overlay activation signal, said remote control unit comprising a encoder configured to encode the user action into an IR signal and an IR transmitter transmitting **[*19]** the IR signal and the combiner circuit comprises an IR receiver and an IR decoder configured to receive and decode the IR signal into said overlay activation signal.

14. The TV-Internet Integration circuit of claim 1 in which the combiner circuit comprises a programmed processing unit carrying out at least some of the responding to the overlay activation criterion and the overlay activation signal.

Renee Preston

15. A TV-Internet Integration method combining, at a user's premises, TV channel video with Internet Protocol (IP) material selected by the user through overlays on the TV channel video displayed in response to an overlay activation criterion that the user has selected, comprising: providing a combiner circuit at the user's premises having a first input for receiving the TV channel video and a second input for receiving the IP material, and further having an output for outputting the combined video; wherein: the TV channel video conforms to a TV broadcast format standard as received at the combiner circuit; and the IP format material, as received at the combiner circuit, conforms to an IP format standard that is different from the TV broadcast format standard and is received at the **[*20]** combiner circuit via a path different from that for the TV channel video at least in part; storing in a memory of the combiner circuit, at the user's premises, plural overlays each identifying a respective source of IP material; providing a display screen at the user's premises coupled with the combiner circuit to receive and display the combined video as a screen image; causing the combiner circuit to: respond to an overlay activation criterion to cause the display screen to display the overlays as at least a part of the screen image, and respond to an overlay activation signal selected by the user at the user's premises and identifying one of the displayed overlays to cause the screen to display IP format material from the IP source associated with the identified overlay; wherein depending on the user's selection the screen image is at respective times the TV channel video with or without overlays thereon and the IP material that the user has selected through the displayed overlays.

18. The TV-Internet Integration method of claim 15 including generating the overlay activation criterion at the user's premises.

'621 Patent claims 1, 4, 9, 11

1. A TV-Internet Integration **[*21]** process to combine, at a user's premises, TV channel video with Internet Protocol (IP) material, comprising: receiving the TV channel video at a first input at the user's premises, receiving the IP material at a second input at the user's premises, and outputting display drive signals to a TV screen at the user's premises; wherein (i) as received at the user's premises, the TV channel video conforms to a TV broadcast format standard; (ii) as received at the user's premises, the IP format material conforms to an IP format standard that is different from the TV broadcast format standard and (iii) the IP material is received via a path different from that for the TV channel video at least in part; storing, in a memory, one or more overlays each identifying a respective source of IP format material; selectively generating display drive signals that cause the TV screen to display the TV channel video received at the first input; responding to an overlay activation signal by reading out the one or more overlays from the memory and generating display drive signals that cause the TV screen to display the one or more overlays; and responding to a user's selection of one of the displayed overlays **[*22]** by generating display drive signals that cause the TV screen to display the IP material associated with the selected overlay and received at the second input, wherein, depending on the user's selection at the user's premises, the TV screen displays, at respective times, the TV channel video received at the first input, the one or more overlays, and the IP material associated with the selected overlay and received at the second input.

4. The TV-Internet Integration process of claim 1 in which the overlay activation signal is generated as a function of testing if specified conditions at the user's premises match contents of the memory.

9. The TV-Internet Integration process of claim 1 in which the TV screen displays at least one of the one or more overlays in response to a special overlay activation signal from an external source timed relative to an event in the TV channel video displayed on the TV screen.

11. The TV-Internet Integration process of claim 1 including selectively processing, at the user's premises, an overlay activation signal per input from the user.

STATEMENT OF RELATED CASES

As of the date of this filing, no related cases exist.

STATEMENT OF [*23] JURISDICTION

The United States District Court for the District of New Jersey had jurisdiction over this patent infringement action under 28 U.S.C. § 1338(a). This Court has jurisdiction over the district court's April 17, 2020 final order pursuant to 28 U.S.C. § 1291. TVnGO LTD (BVI) timely appealed to this Court on May 15, 2020.

STATEMENT OF THE ISSUES

TVnGO LTD (BVI) ("TVnGO") asks the Court to review the district court's findings de novo and conclude that the district court erred in finding that U.S. Patent Nos. 8,132,220; 9,124,945; 9,392,339; ***9,407,969***; and 9,794,621 were invalid for indefiniteness. The following questions are presented:

1. Whether there existed clear and convincing evidence of invalidity;

2. Whether the district court misconstrued the true scope of the claim terms at issue, and misconstrued the scope of certain dependent claims;

3. Whether the district court erred in finding the Asserted Patents invalid for indefiniteness when the prosecution history supports the opposite conclusion.

STATEMENT OF THE CASE

I. Statement of the Facts

This case involves five patents that claim priority to 2005 and describe and claim various aspects **[*24]** of what makes a Smart TV "smart:" U.S. Patent Nos. 8,132,220 ("the '220 Patent"); 9,124,945 ("the '945 Patent"); 9,392,339 ("the '339 Patent"); ***9,407,969*** ("the '969 Patent"); 9,794,621 ("the '621 Patent"), collectively the "Asserted Patents." These patents were conceived, filed and practiced by TVnGO years before the advent of the modern TV streaming service offerings now available. The patents relate to combining traditional television with IP material from the World Wide Web, and represent a significant breakthrough in integrating digital technology with standard television signals. TVnGO's patented system provides integrated viewing of TV and Internet material that is non-obtrusive, comprehensive, and intuitive. These capabilities reside in the unique systems and processes described in TVnGO's five patents. These patents include over 90 granted U.S. claims, examined over the course of 12 years by two different Examiners, as refined by various amendments, office actions, and Examiner interviews.

On June 6, 2018, TVnGO brought a complaint for patent infringement against LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, "LG") in the District of New Jersey. *See **[*25]*** Appx100-143.

On August 7, 2019, the parties initiated a lengthy claim construction process during which LG asserted that 28 terms across the five asserted patents needed to be construed by the court. *See* Appx500-583. TVnGO asserted that each of the terms identified by LG should be afforded their plain and ordinary meaning, but also provided proposed constructions for each term. *See* Appx500-583. The parties later agreed that 4 of the 28 terms did not need to be construed, and exchanged and filed several rounds of claim construction briefs on the remaining 24 terms prior to a scheduled January 8, 2020 Markman hearing.

On January 6, 2020, two days before the hearing, the court issued an Order finding that 18 of the remaining 24 terms identified by LG would be afforded their plain and ordinary meaning, and that the remaining 6 terms, including those in dispute here, were to be argued at the upcoming hearing. Appx1359-1360. The court set aside an entire day to argue these 6 terms, leading to an 8 hour claim construction hearing. As requested by the court, each party's technical expert attended the hearing so that the court could ask them questions "should the Court deem their **[*26]** testimony helpful to the disposition of the remaining issues." Appx1360 at P 4. While the court did ask certain questions of the experts during the hearing, and each testified on direct and cross on those issues raised by the court, the court did not ask any questions of the experts regarding the claim terms now at issue, as the court had focused their testimony on other issues not relevant to this appeal. *See generally* Appx1361-1655. During the claim construction process, TVnGO's expert witness, Michael Sprenger, Ph.D., opined on the validity of the Asserted Patents four times, in three declarations and via in-court testimony.

At the conclusion of the 8-hour claim construction hearing the district court requested post-hearing briefing from each party on the issues discussed during the hearing. Appx1570 at PP 1-2. By then, the claim construction issues had been narrowed to, among others, the meaning of the claim phrases "overlay activation signal" and "overlay activation criterion." The claim term "overlay" was not itself separately disputed, nor were the terms "criteria" or "signal."

Each of the Asserted Patents use the terms "overlay activation signal" or "overlay activation **[*27]** criterion" to identify a key inventive feature of the invention, namely generating (or displaying) "overlays" onto a user's television screen, through which a user can select an overlay to access internet content associated with the overlay. Appx992-995 at PP 1-32. TVnGO and its expert asserted that the plain and ordinary meaning of these terms would be readily understood by a Person of Ordinary Skill in the Art ("POSA") when viewed in the context of the specific claims at issue. Appx994-995 at PP 31-32; Appx1001 at PP 57-58. TVnGO also asserted that the patent specifications supported its positions on claim interpretation, as various embodiments described in the specification support TVnGO's proposed constructions. Appx994-996 at PP 33-37; Appx1001 at PP58-59.

TVnGO originally proposed that the term overlay activation criterion is "a condition for generating an overlay" and that "overlay activation signal" is "a signal for generating an overlay." Appx1002 at P 62.

The term "overlay" as used in the asserted patents, as discussed during the prosecution history, and as used in TVnGO's proposed constructions, refers to one image being superimposed over another image. *See* Appx1722-1723; **[*28]** Appx1293 at PP 14, 15. As such, TVnGO's originally proposed constructions covered the situation where the overlay activation criteria and/or overlay activation signal were used to generate display screens showing an initial overlay (*see, e.g.*, Fig. 7a), and also used to generate display screens showing the IP material associated with an overlay (*see, e.g.*, Figs. 7b-7c). Appx910. To the extent this was not already clear to the court, TVnGO expressly updated its proposed constructions during the briefing process, stating that "overlay activation criteria" should be construed as "a condition for generating an overlay and/or IP material associated with an overlay." Appx1293 at P 15, and that "overlay activation signal" should be construed as "a signal for generating an overlay and/or IP material associated with an overlay." Appx1293 at P 14. [1]

On March 6, 2020, the district court issued a letter order requesting additional briefing from LG on the issue of indefiniteness in order to make sure the court had not "misunderstood LG's arguments" concerning "overlay activation signal" and "overlay activation criterion." **[*29]** Appx1903. The court directed that, if LG contended there were inconsistencies in the use of these terms inherent in any of the patents when considered in isolation, then LG **"shall** support its position with existing caselaw," explain how a POSA would observe the alleged inconsistencies, and explain how a POSA would conduct the analysis. *Id.* By way of example, the court asked: "would a POSA observe any inconsistency if he or she considered **only** the '220 Patent?" *Id.* The court asked similar questions for each of the other patents at issue. *Id.* LG had never asserted this inter-patent inconsistency argument in support of its indefiniteness arguments in any of its prior briefs, or at the Markman hearing.

LG responded to the district court's letter order on March 20, 2020, where it adopted the court's new "inter-patent inconsistency" argument. Appx1914. LG, however, did not offer any supplemental Declaration or testimony from its technical expert in support of its argument or in response to the district court's letter order directing that it do so. *See id.* TVnGO responded to LG's new arguments, pointing out both the legal and factual inaccuracies of its new positions. **[*30]** Appx1943-1957.

On April 17, 2020, the district court issued an order and opinion finding the Asserted Patents invalid for indefiniteness due to alleged inconsistencies in their use of the terms "overlay activation signal" and "overlay activation criterion." Appx1-17. TVnGO timely appealed this finding.

SUMMARY OF THE ARGUMENT

---

[1] The court never addressed these proposed constructions in its Opinion.

The district court erred in finding the Asserted Patents invalid for indefiniteness.

A. TVnGO's Proposed Constructions Are Fully Supported By the Specification, and Are Consistent With How The Terms Are Recited In The Patent Claims.

When properly considered, in context, the claim terms are definite. The district court erred by choosing to analyze the claims in isolation, without reference to their specifications or the manner in which the terms are recited in the Asserted Patents' claims. The court thereby overlooked important nuances in the Asserted Patents, such as that the Asserted Patents describe different embodiments for how an "overlay" can be generated and appear on a television screen. The court's finding of indefiniteness is grounded in an inaccurate analysis of the Asserted Patents.

B. The District Court Made Significant Factual [*31] and Legal Errors in Analyzing the Disputed Claim Terms

The district court made a number of clear factual and legal errors in reaching a finding of indefiniteness. The court misconstrued the Asserted Patents, ignoring the claim term "information" as recited in dependent claims, ignoring testimony from TVnGO's technical expert, and incorrectly concluding that "user command information," as used in the claims, must come from the end user, rather than the Internet. The court also incorrectly determined that claim terms must have the same meaning across all patents, and incorrectly held that an alleged inconsistent use of a term in a dependent claim can render an independent claim invalid. In addition, the court found the Asserted Patents invalid despite a lack of clear and convincing evidence of invalidity, and did not make any attempt to construe the claim terms so as to render them valid.

C. The District Court Did Not Accord the Proper Weight to the Prosecution History.

The prosecution history of the Asserted Patents strongly establishes that the claim terms are not indefinite. Indeed, the express discussion between the Applicant and the Examiner about the claim terms during **[*32]** office actions and amendments for the Asserted Patents shows that the terms were clearly understood by the Examiner, during the Asserted Patents' prosecution. The district court largely ignored the extensive prosecution dialogue related to the claims, leading to an erroneous finding of invalidity.

ARGUMENT

I. Standard of Review

The ultimate conclusion that a claim is indefinite under 35 U.S.C. § 112, P 2 is a legal conclusion that is reviewed de novo. *Eidos Display, LLC v. AU Optronics Corp.*, 779 F.3d 1360, 1364 (Fed. Cir. 2015). A district court's underlying factual determinations are reviewed for clear error. *Id.*

The words of a disputed claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). The starting point for claim interpretation is the claim language itself, which can "provide substantial guidance as to the meaning of particular claim terms." *Id. at 1314*. Other intrinsic evidence is also considered, including the claims, the specification, and the prosecution history. *Id. at 1312-17*. Extrinsic evidence, including "expert and **[*33]** inventor testimony, dictionaries, and learned treatises," may be used, when "considered in the context of the intrinsic evidence." *Id. at 1317-19*.

"[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). "Reasonable certainty" does not require "absolute or mathematical precision." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1381 (Fed.

Cir. 2015) (internal quotation marks omitted). The party seeking to have a claim deemed indefinite has the burden of proving indefiniteness by clear and convincing evidence. Nautilus, 572 U.S. at 912 n.10.

II. TVnGO's Proposed Constructions Are Fully Supported By the Specification, and Are Consistent With How The Terms Are Recited In The Patent Claims.

When properly analyzed in the context of the specification, prosecution history, and the entire claim, the disputed claim terms are far from indefinite. Aventis Pharm. Inc. v. Amino Chems. Ltd., 715 F.3d 1363, 1374 (Fed. Cir. 2013). As TVnGO and its expert argued, when viewed in this context, the plain and ordinary **[*34]** meaning of the disputed terms would be readily understood by a POSA. Appx994 at PP 31-32; Appx1001 at PP 57-58. The patent specifications support TVnGO's proposed constructions, as does the prosecution history, where these specific claim terms were added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed to issue numerous times in five different patents over a 10 year period. Appx994-996 at PP 33-37; Appx1001 at PP 58-59.

In general, the patents are directed at systems and methods that permit a user to view both conventional television as well as IP content via the use of one or more overlays. An overlay as used in the Asserted Patents refers to second data (IP data or material) superimposed over first data (TV video). Appx1290 at P 5. This is consistent with the prosecution history. *Id.* at P 6; Appx1321.

Figure 7, by way of example, shows the "default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40." Appx910; Appx915 at 7:29-31.2. Figure 7 also shows "IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site **[*35]** of known address." Appx910; Appx915 at 7:33 35.

The patents further describe different embodiments of how an overlay is generated and appears on the TV screen. *See* Appx910. For example, the patents describe how the user can select what types of IP data they wish to receive and when. Appx913 at 4:28-33. As described in the specification, "[u]pon detecting a matching event, corresponding to received IP content that is of interest to the subscriber, the TV-Internet Integration Box 16 overlays the matched IP content with the current broadcast and displays the new integrated video on the subscriber's TV set 17.

For example, the matched information may be an icon that indicates to the subscriber that an Internet movie is currently being broadcast; or it may be an advertisement or information related to the TV program being broadcast." Appx913 at 4:41-49. This is an example of an overlay activation criterion being met and the system generating one or more overlays in response. The patents also describe examples in which the user can respond to one of the displayed overlays, for example via a remote control, to view the IP data associated with an overlay. This is an example of the **[*36]** use of an overlay activation signal, the result of which is shown by way of example in Fig. 7c, which shows the IP content associated with the selected overlay occupying substantially the entire TV screen. Appx910; Appx915 at 7:42-44.

The specification provides examples of overlay activation criteria and how they are used in the invention. In one example, an advertiser (an IP content provider) creates IP content (such as an advertisement) which includes time and channel information (overlay activation criteria):

> The advertiser typically pays for specific *time slots and for one or more specific channels during which his advertisement will be broadcast.* Thus, in addition to the advertising content which is prepared and then stored on the web server in known manner, the advertiser *also specifies when the advertisement is to be broadcast and on which TV channel or channels.* By such means, a sports advertiser can request time during the interval of a football match to broadcast a commercial, while a toy advertiser would obviously prefer to broadcast a commercial during a children's TV program.

Appx913 at 3:57-66. This is consistent with the prosecution history, as discussed below, **[*37]** in which the exemplary overlay activation criteria of time and channel information were specifically replaced with the phrase "overlay activation criterion."

The specification describes how overlay activation criteria, such as time and channel information, are used by the TV-Internet Integration Box to determine if the "overlay activation criterion" is met. *See* Appx913 at 4:19-49. This is consistent with the prosecution history, in which satisfying the "overlay activation criterion" was described as: "the TV set being tuned to one of said TV subscriber channels during a time that conforms to the timing information embedded in the second data." *See* Appx1722.

The specification further elaborates on examples where time and channel information are included as overlay activation criteria. *See* Appx1726. The specification is clear as to what is included in the overlay-enabling digital data and is clear as to examples of "overlay activation criterion" that can be part of the overlay-enabling digital data. *See id.* As a general matter, the basic path of overlay-enabling digital data is clearly described in the patent, as would be understood by a POSA, and further exemplifies how **[*38]** the "overlay activation criterion" is used by the system. Appx1680-1691 at PP 6-22; Appx1291-1293 at PP 9-15.

As with "overlay activation criterion," there are also various embodiments described and claimed demonstrating one or more overlays being generated by "overlay activation signals." Appx1291-1292 at P 9-10. An overlay activation signal is just that-a signal-that, by way of example, may come from a remote control unit. Appx1002 at P 64. It can be used for generating one or more overlays, including the IP material associated with an overlay, consistent with TVnGO's proposed constructions.

For example, the specification describes how "the displayed IP content [*i.e.*, an overlay] may optionally contain textual information advising the subscriber to press a particular button on the remote control unit." Appx913 at 4:54-56. "On pressing the key on the remote control unit" that corresponds to the displayed icon, the IP content corresponding to the selected overlay is displayed on the TV screen as an overlay. Appx915 at 7:35-38. This passage confirms that in certain embodiments, the overlay that is generated via the overlay activation signal can be the associated IP content. **[*39]** In other embodiments, "[t]he IP content can be a custom designed web page for TV, a game or advertisement[,] movie or any other information placed on the matched record." Appx913-914 at 4:66-5:1. Just as an "overlay activation criterion" can be used to generate an overlay, an "overlay activation signal" can also be used to generate an overlay. These terms have meanings that are recognizable to a POSA. Appx1291 at P 11.

The use of the term "generate" as used in TVnGO's proposed constructions also finds ample support. For example, claim 1 of the '220 and '969 patents recite "generating at the user's premises a corresponding overlay only if said activation criteria is met." Appx916 at 9:9-11; Appx961 at 9:21-24.

The claims recite exactly what "generating" means where it further recites that "wherein generating an overlay includes: generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner unit **[*40]** to retrieve said content, generate a second display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set." Appx916 at 9:11-24; Appx961 at 9:24-35. In each instance, "generating" as used in the '220 and '969 patents means generating "display screens" that show (a) the TV video, (b) the image (*i.e.*, an overlay), or (c) the IP content associated with the overlay.

As discussed in detail by TVnGO's expert, the overlay activation criteria (which comes from the IP content provider), can include criteria that corresponds to information provided by the user (*e.g.*, "user command information" as recited in '220 patent dependent claim 9, by way of example. Appx1688-1691 at PP 20-24. For example, the overlay activation criteria provided by an advertiser may include information concerning the type of advertisement it wants to provide the user (an ad for Electronics), and that criteria can be matched against information provided by the end user concerning the types of advertisements they are interested in receiving (Show Ads For Electronics). *Id.* The district court failed to understand that the "user command information" **[*41]** does in

fact come from the Internet, not the end user, and thus there is no inconsistency between independent and dependent claims in the '220 and '969 patents.

Like the '220 and '969 patents, claim 1 of the '945 patent recites a combiner circuit that is configured to (i) "generate display drive signals causing the TV screen to display the TV channel video receive at the first input," and further configured to respond to the processing of an overlay activation signal and (ii) "generate display drive signals causing the TV screen to display the overlays," and still further configured to respond to a user selecting one of the displayed overlays and "generate display drive signals causing the TV screen to display the IP material associated with the selected overlay." Appx931 at 9:16-35.

Thus, just like the '220 and '969 patents, the '945 patent recites "generating" display screens that show (a) the TV channel video, (b) an overlay, or (c) the IP material associated with an overlay. Each use, and the result, is clear in context. Similarly, the '621 patent recites a process of "generating display drive signals" that cause the TV screen to display "the TV channel video," and "generating **[*42]** display drive signals that cause the TV screen to display the one or more overlays," and also "generating display drive signals that cause the TV screen to display the IP material associated with the selected overlay." Appx978 at 9:18-28. A POSA would readily understand the claim terms at issue, how they are being used in the context of each claim, and the result of each use. Appx1293 at PP 14-15.

Further, as the claim language of the '339 patent makes clear, the overlays are generated only when the overlay activation criteria is satisfied. For example, claim 1 recites how the combiner circuit is configured to "respond to the overlay activation criteria to cause the display screen to display the overlays at least a part of the screen image," and is also configured to "respond to an overlay activation signal" . . . "identifying one of the displayed overlays to cause the screen to display IP format material from the IP source associated with the identified overlay." Appx946 at 9:8-15.

When considered in context, how the system uses both the overlay activation criteria and signals, and the result displayed on the user's TV screen, is clear. Appx1291-1293 at PP 9-15. It is apparent **[*43]** that, properly analyzed in context, the disputed claims are definite. The district court, however, choose to analyze the claims in isolation, without considering their context, thereby reaching the improper conclusion that the claims were indefinite.

III. The District Court Made Significant Factual and Legal Errors in Analyzing the Disputed Claim Terms

The district court's finding of indefiniteness is premised on a number of clear factual and legal errors. The district court significantly misconstrued the Asserted Patents, erroneously held that claim terms must have the same meaning across all patents (*e.g.*, a "signal" can only be used to display an overlay or IP material, but not both), and analyzed the disputed claim terms under the incorrect belief that an alleged inconsistent use of a term in a *dependent* claim (which, factually, is not inconsistent) renders an *independent* claim invalid. The district court further found the Asserted Patents invalid despite a lack of clear and convincing evidence of invalidity, and, in failing to address the proposed alternative construction proffered by TVnGO, made no attempt to construe the claim terms so as to render them **[*44]** valid.

a. The district court's analysis of the Asserted Patents was factually incorrect

In analyzing the Asserted Patents, the district court held that "LG has persuasively demonstrated" that the terms "overlay activation criterion" and "overlay activation signal" create "irreconcilable inconsistencies" both across the Asserted Patents and when the independent claims are assessed in light of the dependent claims, what the district court defined as "inter-patent inconsistencies" and "intra-patent inconsistencies." Appx7-8. This conclusion is contrary to fact, however, and can only be reached if the plain language of the claim terms and the context in which they are used are ignored.

With regard to the alleged inter-patent inconsistency, the district court held that the independent claims use "overlay activation criterion" in a manner that is inconsistent with the dependent claims. Appx8. The court correctly stated that "overlay activation criterion" as used in independent claims 1 and 13 of the '220 and '969 patents is derived from the Internet, but erroneously stated that "user command information," as used in dependent claims 9 and 20, must come from the user, resulting in **[*45]** an alleged inconsistency. *Id.* In support of this argument, the court stated that claims 9 and 20, and the patent specifications, state that user command information is provided at a user's premises, rather than over the internet. [2] In support of this argument, the district court cited the '220 patent at column 7, lines 2 through 6, claims 3 and 15 of the '220 patent, the '969 patent at column 7, lines 10-15, and claims 3 and 15 of the '969 patent. *Id.* However, none of these cites support the court's opinion.

The specification sections of the '220 and '969 patents cited by the district court (which are identical) simply discuss how an infrared receiver can receive signals from a remote control device. Claims 3 and 15 of the '220 patent, and claims 3 and 15 of the '969 patent, relate to receiving a command from a user and resizing the overlays in response. While there is no dispute that a user can enter a command via a remote control, none of these citations support the court's opinion that "user command *information*" cannot form part of the **[*46]** overlay activation criteria coming from the Internet so as to be compared to settings input by a user via a remote control.

Notably, "user command information" was not a term in dispute. *See* Appx500-583. LG therefore did not offer any expert testimony regarding how a POSA would understand this term, nor did LG offer any expert testimony on this claim term in response to the district court's March 6, 2020 letter order. Instead, LG relied solely on attorney argument in arguing that there was an inconsistency between the independent and dependent claims because of the use of "user command information." *See Invitrogen Corp. v. Clontech Labs., Inc.*, 429 F.3d 1052, 1068 (Fed. Cir. 2005); *Univ. of S. Fla. v. United States*, 146 Fed. Cl. 274, 294 (2019).

In accepting LG's unsupported attorney argument, the district court ignored TVnGO's expert testimony regarding the relationship between the "user command information" as recited in the dependent claims, which comes from the internet, and "user commands" which come from a user, not the Internet. As TVnGO's expert explained in detail, the overlay activation criteria coming from the Internet can include "user command *information*" that corresponds to settings input by the user. Appx1688-1691 at PP **[*47]** 20-24. For example, the overlay activation criteria provided by an advertiser may include information concerning the type of advertisement it wants to provide the user (an ad for Electronics), and that overlay activation criteria can be matched against information provided by the end user concerning the types of advertisements they are interested in receiving (Show Ads For Electronics). *Id.*

Thus, from a factual standpoint, there is no inconsistency, and the court was wrong to find one. The court simply ignored the claim term " *information*" as recited in the dependent claims, ignored TVnGO's technical expert testimony on this point, and wrongly found that the "user command information" necessarily comes from the end user, and not the Internet. Appx9. This was error.

The district court was not only wrong from a factual matter, but from a legal perspective as well. Even if, *arguendo*, the district court was correct that the "user command information" recited in the dependent claims was somehow inconsistent with the overlay activation criteria of the independent claims, such a finding would support invalidating the dependent claims, not the independent claims.

The Federal **[*48]** Circuit has held that different uses in dependent and independent claims do not need to be reconciled. "[T]he language of a dependent claim cannot change the scope of an independent claim whose meaning is clear on its face. We have held that '[w]hile it is true that dependent claims can aid in interpreting the scope of claims from which they depend, they are only an aid to interpretation and are not conclusive. The dependent claim tail cannot wag the independent claim dog.'" *Multilayer Stretch Cling Film Holdings, Inc. v. Berry Plastics Corp.*, 831 F.3d 1350, 1360 (Fed. Cir. 2016) (emphasis added) (quoting *N. Am. Vaccine, Inc. v. Am. Cyanamid Co.*, 7 F.3d 1571, 1577 (Fed. Cir. 1993)); *see also Regents of Univ. of Cal. v. Dakocytomation Cal. Inc.*,

---

[2] The court's argument mirrors an argument raised by LG for the first time in response to the court's March 6, 2020 letter order. Appx1914.

517 F.3d 1364, 1375 (Fed. Cir. 2008) (holding that the presumption that an independent claim should be construed in view of its dependent claim is rebuttable).

Further, it is axiomatic that independent claims govern dependent claims, rather than the reverse. "[W]here the scope of the independent claims is clear, the Federal Circuit has held that the failure of a patentee to conform dependent claims to the scope of the independent claims results in invalidation of the inconsistent [dependent] claims rather than an expansion of the independent **[*49]** claim." *Baxalta Inc. v. Genentech, Inc.*, No. CV 17-509-*TBD, 2018 WL 6304351, at *11 (D. Del. Dec. 3, 2018)* (citations omitted); *see also Regents Univ., 517 F.3d at 1375-76*; *Seachange Int'l, Inc. v. C-COR, Inc., 413 F.3d 1361, 1369-75 (Fed. Cir. 2005)*. Here, even if the district court was correct in finding that the dependent claims are somehow broader than the independent claims from which they depend (they are not), this finding would only affect the validity of the dependent claims, not the validity of the independent claims. Despite the clear case law on these point, however, the district court incorrectly permitted the "dependent claim tail [to] wag the independent claim dog," leading to a misplaced finding of indefiniteness.

The district court next addressed "overlay activation signal" as used in '621 and '945 patents. The court concluded that this term is inconsistent because a POSA "is confused; does the overlay activation signal result in display of a stored overlay, or does it result in the display of IP content?" Appx9. The district court concluded that the Asserted Patents provide no guidance as to how a POSA could confidently chose between the two possibilities.

However, the two possibilities offered by the court represent a false choice, because **[*50]** an "overlay activation signal" can be used both to display a stored overlay *and* to display IP content, as discussed *supra*. This is amply supported by the specification, and when viewed in the context of the entire claims at issue, it is clear to a POSA which is being used and when. Appx910; Appx1684-1686 at PP 12-13. Indeed, TVnGO's proposed construction covered both possibilities. Appx1293 at PP 14-15.

The district court also analyzed the '339 patent, asserting that the use of "overlay activation criterion" is "inconsistent" because in certain embodiments it causes the display of "overlays" while in other instances it displays "IP content." Appx10. There is support for both in the specification, and TVnGO's proposed construction covers both. Appx1293 at PP 14-15.

With regard to the Court's "intra-patents inconsistency" holding, the court held that the '339 patent's use of "overlay activation criterion" creates an irreconcilable inconsistency with the '621 patent's use of "overlay activation signal," opining that "[t]he simultaneous use of two different words with different meanings to achieve the same result- display of an overlay- produces an irreconcilable inconsistency **[*51]** within the Patents-in-Suit which cannot inform a POSA, with reasonable certainty, the scope of the invention." Appx12; *see generally* Appx10 n.9, Appx11. However, an "overlay activation criterion," as defined in the context of the Asserted Patens and as proposed by TVnGO, is a "condition" for displaying an overlay, or the IP material associated with an overly. Similarly, an "overlay activation signal" is a signal for displaying an overlay, or the IP material associated with the overlay. The fact that an overlay, or the IP material associated with an overlay, can be displayed via more than one way, *i.e.*, by an "overlay activation criterion" or an "overlay activation signal" does not render the claims indefinite. Both uses find support in the specification, and a POSA would understand which is being used in the context of each of the various claims at issue. Appx1293 at PP 14-15.

The district court further asserted that an alleged inconsistency exists between the '220 and '969 patents, because their claims recite "generating" an overlay when the "overlay activation criterion" is met, but the '339 patent's claims recite "displaying" an overlay when the "overlay activation criterion" **[*52]** is met. Appx12-13. However, this analysis views the claim terms in isolation, rather than considering the precise claim language at issue in context. In the '220 patent, claim 1 recites "processing at the user's premises said overlay enabling digital data and generating at the user's premises a corresponding overlay only if said activation criteria is met." Appx916 at 9:8-11. In contrast, in the '339 patent, claim 1 states that the combiner circuit is configured to "respond to an overlay activation criteria to cause the display screen to display the overlays as at least a part of the screen image." Appx946 at 9:8- 10.

In short, the two patents use different words to describe similar outcomes. There is nothing remarkable about this- this is exactly what patent claim drafters do every day in prosecuting related patent applications.

b. The district court's analysis of the Asserted Patents was **legally incorrect**

The district court held that a claim term can only have one meaning- *i.e.*, an overlay activation signal or overlay activation criteria cannot result in the display of an overlay is some instances, but display the associated IP material in other instances. Or "generate" **[*53]** cannot mean the same thing as "display." According to the court, "TVnGO cannot point to anything in the claim language, or anywhere else, from which a POSA could discern why two different words are used to connote the same result." Appx13.

While putting aside the fact that the court chose to ignore the alternative constructions proposed by TVnGO that addressed this apparent (albeit false) issue, as TVnGO repeatedly argued to the district court, caselaw holds the exact opposite proposition - namely, that while there exists a "presumption that the same terms appearing in different portions of the claims should be given the same meaning unless it is clear from the specification and prosecution history that the terms have different meanings at different portions of the claims." *Fin Control Sys. Pty v. Oam*, 265 F.3d 1311, 1318 (Fed. Cir. 2001) (emphasis added); *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003) (same).

Indeed, it is black letter law that each claim of a patent must be analyzed independently. "[V]alidity of each claim must be evaluated individually as provided in *35 U.S.C. § 282*: Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity **[*54]** of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim." *35 U.S.C. § 282* (1988).

Furthermore, while there may exist a presumption that a claim term should be given the same meaning across different claims, claim terms can have different meanings across the same or related patents. *See Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367, 1376-77 (Fed. Cir. 2008) ("[T]he patentee's mere use of a term with an antecedent does not require that both terms have the same meaning.") (rejecting district court's determination that term claims were "insolubly ambiguous for requiring that a single word be interpreted differently in different portions of a single claim."); *Eaton Gas Sys. Inc. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1031 (Fed. Cir. 2002) (construing claim term as having two different meanings based on its use in "two contexts with a subtle but significant difference"); *Aventis Pharm.*, 715 F.3d at 1374 ("We have previously held that the same claim term can have different constructions depending upon the context of how the term is used within the claims and specification.").

As previously noted, there is nothing improper in using the same claim term to mean **[*55]** different things, so long as the meaning of the term is clear from the context in which that term is placed., as is the case here. Appx1291-1293 at PP 9-15. *See Microprocessor*, 520 F.3d at 1376-77. Notably, two different claim terms can also mean the same thing. "[C]laim drafters can [] use different terms to define the exact same subject matter. Indeed this court has acknowledged that two claims with different terminology can define the exact same subject matter." *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed. Cir. 2006). Thus, here, the claim terms permissibly identify two different ways to achieve the same result, using a "criteria" to generate an overlay and using a "signal" to generate an overlay.

Instead of considering the claim terms in context, the district court chose to look at the claim terms in isolation. The district court recognized *Phillips's* holding that claim terms are normally used consistently, but failed to analyze the remainder of the *Phillips* decision, which also held that inconsistencies in claim terms do not of themselves render claims invalid: "[C]laim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate **[*56]** the meaning of the same term in other claims . . . . Differences among claims can also be a useful guide in understanding the meaning of particular claim terms." *Phillips*, 415 F.3d at 1314-15 (emphasis added) (citations omitted). The district court ignored the context in which the disputed terms were used and ignored

substantial caselaw that holds that terms used in different claims do not need to be reconciled. This was incorrect, and the resulting finding of invalidity must be overruled.

c. There was no clear and convincing evidence of invalidity

The district court erred in finding the disputed claim terms indefinite despite a lack of clear and convincing evidence as to the claims terms' indefiniteness. The party seeking to have a claim deemed indefinite has the burden of proving indefiniteness by clear and convincing evidence. *Nautilus*, 572 U.S. at 912 n.10.

Here, it is notable that, after six briefs on claim construction, multiple expert declarations on the Asserted Patents, and an eight-hour claim construction hearing, including, at the court's insistence, the presence of each party's technical expert, and despite having had the opportunity to ask the technical experts **[*57]** questions on the issues, the district court still required additional briefing on the topic of indefiniteness in order to comprehend LG's arguments. Appx1903. The procedural history alone suggests that LG's arguments on indefiniteness were neither clear nor convincing.

This case is distinct from cases in which indefiniteness is readily apparent. In *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1341 (Fed. Cir. 2015), for example, a patent was found invalid for indefiniteness where the term "molecular weight" was undefined and could refer to any of three weight measures. In the instant case, by contrast, the intrinsic and extrinsic evidence related to the Asserted Patents makes it plain that such multiple meanings are not possible for the disputed claims. The Asserted Patents' prosecution history, TVnGO's expert testimony, and TVnGO's well-founded arguments in multiple rounds of briefing clearly and convincingly establishes that the disputed terms are not indefinite.

The procedural history suggests that the district court harbored serious doubts about the arguments LG presented. Despite these doubts, the district court found the disputed claims indefinite. In doing so, the district court violated the well-established **[*58]** rule that "claim language should generally be construed to preserve validity, if possible." *Tate Access Floors, Inc. v. Interface Architectural Res., Inc.*, 279 F.3d 1357, 1367 (Fed. Cir. 2002). Here, the district court simply ignored the alternative proposed constructions proffered by TVnGO that would obviate many, if not most, or the court's concerns, and would have rendered the patents not indefinite. If the district court had doubts as to LG's arguments-if the district court was in doubt as to the validity of the claims-it should have accepted TVnGO's alternative constructions of the claim terms and construed the claims as to preserve their validity.

Instead, the district court made no attempt to preserve the validity of the claim terms and declined to consider TVnGO's attempts to offer proposed constructions that would have covered various alternatives. The district court chose to adopt LG's view that the claims were unsalvageable (a view LG presented despite expending multiple pages of briefing on the meaning of the terms). Appx17. This was improper, and the district court's finding of invalidity must be overruled.

IV. The District Court Did Not Accord the Proper Weight to the Prosecution History.

The district **[*59]** court's invalidity analysis is premised on conclusions that are contrary to the patent prosecution history, which strongly establishes that the claim terms are not indefinite. The district court largely ignored the prosecution histories, asserting that they "provide nothing more than what limited information is disclosed by the specifications." Appx15. But, in fact, the prosecution histories do much more, and strongly support that the disputed terms are not indefinite.

Courts are directed to "start[] the decisionmaking process by reviewing the same resources" as a POSA, namely, "the patent specification and the prosecution history." *Phillips*, 415 F.3d at 1313-14; *see also Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) ("We cannot look at the ordinary meaning of the term ... in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history."); *V-Formation, Inc. v. Benetton Group SpA*, 401 F.3d 1307, 1310 (Fed. Cir. 2005) (the intrinsic record "usually provides the technological and temporal context to enable the court to ascertain the meaning of the claim to one of ordinary skill in the art at the time of the invention"). "[T]he prosecution history

provides evidence **[*60]** of how the PTO and the inventor understood the patent. Furthermore . . . the prosecution history was created by the patentee in attempting to explain and obtain the patent." *Phillips, 415 F.3d at 1317* (citations omitted).

When the prosecution history shows that an examiner understood both the claims and written description with sufficient certainty to prosecute the application, it is strong evidence that the claims in dispute are not indefinite. *See Sonix Tech. Co. v. Publ'ns Int'l, Ltd., 844 F.3d 1370, 1379-1381 (Fed. Cir. 2017)* (reversing district court's finding of indefiniteness because, inter alia, "[t]he examiner's knowing allowance of claims based on the term that is now questioned"). The present case is therefore strongly similar to *Via Vadis, LLC v. Blizzard Entm't, Inc., No. 2019-2269, 2020 WL 3816829, at *5 (Fed. Cir. July 8, 2020)*, where the Federal Circuit found that a patent's intrinsic evidence and the context of the patent rendered the meaning of the contested term "prespecified parameters" sufficiently clear, and held that they could not affirm the district court's finding of indefiniteness for this term. In *Via Vadis*, the Federal Circuit rejected the argument that "the term 'prespecified parameters' is indefinite because neither the claims nor the specification **[*61]** explains how the data transmission parameters are specified or who or what specifies those parameters, we see no reason why in the context of this patent such details are needed to understand the scope and meaning of the disputed claim term." *Id.*; *see also Markman v. Westview Instruments, Inc., 52 F.3d 967, 986 (Fed. Cir. 1995)* ("[i]f the patent's claims are sufficiently unambiguous for the PTO, there should exist no factual ambiguity when those same claims are later construed by a court of law in an infringement action.").

Thus, the district court is correct that "whether an individual patent examiner, or examiners, understood what the claim terms meant" is not the *sole* inquiry for indefiniteness. Appx16. Nonetheless, the district court nevertheless erred in failing to grant due weight to the context of the patents and the patent prosecution history in its indefiniteness inquiry.

The claims at issue in the indefiniteness inquiry were not hidden within voluminous prosecution text, but were expressly added during the prosecution of the patents. These terms were explicitly considered, vetted, and approved by the PTO. Here, the prosecution history plainly establishes that the Examiner understood the disputed **[*62]** terms and found them to be sufficiently clear.

a. The prosecution history establishes that "overlay activation criterion" is not indefinite

The '220 patent's prosecution history establishes that "overlay activation criterion" is not indefinite. When originally filed, the claims did not recite "overlay activation criterion." Instead, they were directed at timing and channel information -an embodiment of "overlay activation criterion." The original independent claims stated that the "second data" included data representative of:

. a web link indicating a website where an IP content relating to the second data is stored;

. a program details image to be displayed indicative of the IP content;

. timing information indicating when the program details image is to be displayed; and

. one or more TV subscriber channels on which said program details image is to be displayed;

Appx1709. The claims were subsequently amended by the Applicant to replace "second data" with the phrase "overlay-enabling digital data." The above-listed aspects of the second data were amended as follows:

. a web link indicating a website where [O>an IP<O] content that is associated with said overlay-enabling **[*63]** digital [O>relating to the second<O] data is stored;

. a n [O>program details<O] image to be displayed indicative of the [O>IP<O] content associated with said overlay-enabling digital data;

. an overlay activation criterion [O>timing information indicating when the program details image is to be displayed<O];

. [O>one or more TV subscriber channels on which said program details image is to be displayed;<O]

Appx1717. Thus, the phrases regarding timing information and subscriber channels were replaced by the phrase "overlay activation criterion." The independent claims as originally filed also included language regarding overlaying content on a TV screen when timing and subscriber channel limitations were satisfied. This language was later replaced as follows:

the combiner unit is responsive to an overlay activation criterion being met for [O>the<O] TV set being tuned to one of said TV subscriber channels during a time that conforms to the timing information embedded in the second data for combining said first data with data representative of the program details image so that the program details image is overlaid on the first image and is contained within an [O>area **[*64]** occupied by the first image<O] generating a corresponding overlay, including...

Appx1722-1723. As the above amendment demonstrates, timing and channel information were originally contemplated as exemplary overlay activation criteria, and the claims demonstrated how they might be met for generation of an overlay ("the TV set being tuned to one of said TV subscriber channels during a time that conforms to the timing information embedded in the second data..."). *Id.*

Notably, the term "overlay activation criterion" was clearly understood by the Examiner, who did not object to the changes and continued to cite art allegedly disclosing the feature once it was added to the claims. In a July 14, 2011 Office Action, the Examiner indicated that "overlay activation criterion" was allegedly disclosed in the Butler reference, stating, among other things, "Butler discloses displaying hyperlink overlays in accordance with control data, which indicate the times when the overlays are to be displayed (corresponding to activation criterion)." Appx1746. This office action issued after an in-person interview between the Examiner, the inventor, and prosecution counsel where "Applicant presented **[*65]** an overview of the claimed invention." Appx1757. The Examiner's examination of the alleged disclosure of the "overlay activation criterion" in the Butler reference demonstrates that the Examiner had a clear understanding of "overlay activation criterion" and could readily analyze prior art for comparable claims.

A second in-person interview with the Examiner was held on August 18, 2011. Appx1761. The Examiner's Summary of the meeting is telling: "Applicant discussed the claimed invention with respect to receiving an overlay activation criterion and video TV signals from two separate unrelated sources. Examiner agreed that neither Akiyama or Butler teaches receiving the overlay activation criterion and the video TV signal from two separate sources." *Id.* (emphasis added). This was confirmed in the Notice of Allowance where the Examiner stated that the closest prior art of record "fails to disclose that the source of the video content and the overlay activation criteria are unrelated and received via mutually distinct and independent inputs." Appx1771.

The extensive prosecution dialogue between the Examiner and the Applicant-including two office actions after the addition **[*66]** of "overlay activation criterion," four Examiner interviews, and multiple responses by the Applicant demonstrates that the Examiner understood the term "overlay activation criterion" and was able to determine that it was not disclosed in the prior art.

b. The prosecution history establishes that "overlay activation signal" is not indefinite

The prosecution histories of the '945 and '339 Patents establish that "overlay activation signal" is not indefinite. This term too did not appear in the application as originally filed; it was added by amendment. Appx1776-1777. Those amended claims were initially rejected by the Examiner. Appx1790. In rejecting these claims, the Examiner noted: "Claim 49 of the instant application corresponds to claim 1 of the ['220] patent by disclosing a similar method of displaying overlay content based on an activation signal.. The difference between the instant application and the ['220] patent is that the instant application claims that the activation signal is received from a user wherein the patent claims the activation signal is received from an internet source."). *Id.* (emphasis added). The language

employed by the Examiner leaves no doubt that **[*67]** the Examiner clearly understood that overlay activation signal had been added to the claims.

The Examiner subsequently reviewed the specification to determine whether the newly added term "overlay activation signal" was supported by the application as originally filed. Appx1791. The Examiner then had a telephone interview with the Applicant in which they discussed the "overlay activation signal" limitation and the specific support for this limitation in the specification. Appx1804. The Examiner agreed that the term was supported and issued a Notice of Allowance in which he made an Examiner's Amendment to the claims reciting the "overlay activation signal." Appx1812.

Thus, as with "overlay activation criterion," the Examiner understood the meaning of "overlay activation signal," analyzed the specification for support, considered the term in light of the prior art of record, and issued a Notice of Allowance amending the claim language in the same clause reciting the "overlay activation signal" claim term.

The same is true for the '339 Patent, where the Examiner analyzed the claims regarding both "overlay activation criterion" and "overlay activation signal." The Applicant and **[*68]** Examiner conducted a telephone interview in which they specifically discussed "support for claim language pertaining to the overlay activation criterion and the overlay activation signal." Appx1821. The Examiner then issued a Notice of Allowance that included an Examiner's Amendment reiterating the full allowed claim language with amendments, including the "overlay activation criterion" and "overlay activation signal" claim terms, determined by the Examiner to place the application in condition for allowance. Appx1829; Appx1832.

CONCLUSION

For the reasons set forth above, TVnGO requests that the Court reverse the district court's finding of indefiniteness.

Respectfully submitted,

Dated: July 27, 2020

/s/ Charles E. Cantine
Charles E. Cantine, Esq.
DUNLAP BENNETT & LUDWIG PLLC
349 5th Avenue
New York, New York 10016
703-737-6942

ccantine@dbllawyers.com

Counsel for Appellant TVnGO LTD(BVI)

CERTIFICATE OF FILING AND SERVICE

I hereby certify that, on July 27, 2020, I electronically filed the foregoing with the Clerk of Court using the CM/ECF System, which will send notice of such filing to all registered users.

I further certify that, **[*69]** upon acceptance and request from the Court, the required paper copies of the foregoing will be deposited with United Parcel Service for delivery to the Clerk, UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, 717 Madison Place, N.W., Washington, D.C. 20439.

Dated: July 27, 2020

Respectfully submitted,

Renee Preston

/s/ Charles E. Cantine
Charles E. Cantine, Esq.
DUNLAP BENNETT & LUDWIG PLLC
349 5th Avenue
New York, New York 10016
703-737-6942

ccantine@dbllawyers.com

Counsel for Appellant TVnGO LTD(BVI)

CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Federal Circuit Rule 35(d) and *Fed. R. App. P. 35(b)(2)* because:

this brief contains 8,669 words, excluding the parts of the brief exempted by *Fed. R. App. P. 32(f)* and Federal Circuit Rule 35(c)(2).

2. This brief complies with the typeface requirements of *Fed. R. App. P. 32(a)(5)* and the type style requirements of *Fed. R. App. P. 32(a)(6)* because:

this brief has been prepared in proportionally space typeface using Microsoft Word in 14-point Times New Roman.

Dated: July 27, 2020

Respectfully submitted,

/s/ Charles E. Cantine

Charles E. Cantine, Esq. **[*70]**
DUNLAP BENNETT & LUDWIG PLLC
349 5th Avenue
New York, New York 10016
703-737-6942

ccantine@dbllawyers.com

Counsel for Appellant TVnGO LTD(BVI)

[SEE ADDENDUM IN ORIGINAL]

End of Document

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Markman Opening Brief

Title

Declaration of Charles E. Cantine

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Opinion

Title

OPINION. Signed by Judge Renee Marie Bumb on 4/16/2020. (dmr) (Entered: 04/17/2020)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Opinion

Title

OPINION. Signed by Judge Renee Marie Bumb on 5/23/2019. (dmr) (Entered: 05/23/2019)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Opinion - USCA

Title

USCA for the Federal Circuit OPINION. (js) (Entered: 06/28/2021)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Answer to Complaint

Title

ANSWER to Complaint with JURY DEMAND , COUNTERCLAIM against TVnGO LTD. (BVI) by LG ELECTRONICS, INC.., LG ELECTRONICS U.S.A., INC..(WALSH, LIZA) (Entered: 09/28/2018)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Brief in Opposition to Motion

Title

BRIEF in Opposition filed by LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC., re 23 MOTION to Dismiss Count Eleven of Defendants' Counterclaims, and Motion to Strike Defendants' Thirteenth Affirmative Defense (Attachments: # 1 Certificate of Service)(WALSH, LIZA) (Entered: 11/05/2018)

Click to view PDF document

End of Document

Renee Preston

TVnGO Ltd. v. LG ELECS., INC.

No. 1:18-CV-10238 (RMB-KMW)

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY

November 19, 2018

Reporter
2018 U.S. DIST. CT. MOTIONS LEXIS 187118 *

TVnGO Ltd. (BVI), Plaintiff, vs. LG ELECTRONICS, INC., and LG ELECTRONICS U.S.A., INC., Defendants.

Type: Motion

Counsel

Charles E. Cantine, Esq. (Pro Hac Vice), Joseph Diamante, Esq. (Pro Hac Vice), Timothy H. Caine, Esq., KING & SPALDING LLP, New York, NY; Matthew T. Eyet, Esq., NJ Supreme Court I.D. No. 018872010, SANDELANDS EYET LLP, Bedminster, NJ, Attorneys for Plaintiff TVnGO Ltd. (BVI).

Title

BRIEF IN SUPPORT OF PLAINTIFF'S MOTION TO DISMISS DEFENDANTS' INEQUITABLE CONDUCT COUNTERCLAIM (COUNT ELEVEN) UNDER FED. R. CIV. P. 12(b)(6) AND MOTION TO STRIKE DEFENDANTS' AFFIRMATIVE DEFENSE UNDER FED. R. CIV. P. 12(f)

Text

[*1] I. Introduction

Plaintiff TVnGO Ltd. ("Plaintiff" or "TVnGO") respectfully moves this Court to dismiss LG Electronics, Inc. and LG Electronics U.S.A., Inc.'s (collectively, "Defendants" or "LG") Eleventh Counterclaim concerning inequitable conduct with prejudice pursuant to *Federal Rule of Civil Procedure 12(b)(6)* for failure to state a claim upon which relief can be granted. Similarly, TVnGO respectfully moves this Court to strike LG's Thirteenth Affirmative Defense concerning inequitable conduct with prejudice pursuant to *Federal Rule of Civil Procedure 12(f)*. LG's inequitable conduct counterclaim and affirmative defense are predicated on TVnGO's alleged failure to disclose references identified during the prosecution of foreign patent applications to the United States Patent and Trademark Office ("PTO"). LG's arguments are without merit - the references it alleges were not disclosed were in fact provided to the PTO during prosecution.

Inequitable conduct claims are serious allegations that have been pled so frequently and egregiously that the Federal Circuit has deemed their overuse "an absolute plague." *Therasense Inc. v. Becton, Dickinson and Co., 649 F.3d 1276, 1289 (Fed. Cir. 2011)* (internal quotations omitted). **[*2]** In view of the seriousness of the allegation, the Federal Circuit has required parties to plead them with particularity. This requires statements detailing the underlying facts from which a court can reasonably infer that a specific party who had a duty to the PTO, with knowledge of a specific fact, had specific intent to misrepresent that fact to the PTO, made the misrepresentation, and that the patent would not have issued but for that misrepresentation.

LG has not satisfied and cannot meet this heightened standard for either its counterclaim or affirmative defense. It is undisputed that the references in question were provided to the PTO during prosecution of the patents-in-suit. It is also undisputed that references were considered by the PTO during the prosecution of the last patent to issue, and that the PTO allowed that application to issue without requiring any amendment to the claims. On this record, LG's claims fail as a matter of law.

Renee Preston

Rather than satisfying the necessary who, what, when, where, and why required by law, LG falls back on a shotgun approach of accusing every individual associated with the prosecution of purposely deceiving the PTO without explaining when, **[*3]** if ever, those specific individuals ever had knowledge of the references or when they intentionally decided not to disclose the references in question. In support of these statements, in lieu of substantial and credible facts, LG relies on "information and belief"- this is insufficient to satisfy the requisite pleading standard. For example, LG has not identified which person or persons it contends had actual knowledge of the references in question:

> Upon information and belief, one or more of the participants in the prosecution of the applications that led to the Patents-in-Suit, including, without limitation, Yaakov Merlin, the named inventor of the Patents-in-Suit, patent attorneys working for TVnGo, including Mr. Klima and Mr. Ivan S. Kavrukov, or other attorneys at the laws firms of The Nath Law Group and/or Cooper & Dunham LLP, and/or other individuals who assisted or participated in the preparation, filing, or prosecution of the Patents-in-Suit...

Dkt. 16, Paragraph 14. This is insufficient.

Moreover, even attempting to apply LG's amorphous theories, LG's claims fail because it cannot succeed on any of them.

For example, LG has not and cannot show that the purported **[*4]** omission was material such that the patents would not have issued "but for" the omission. The evidence of record shows exactly the opposite - the references were considered and the last patent in the chain was allowed over the references without amendment. Rather, LG states that because the various references were raised in foreign prosecutions for patents and claims which LG did not analyze, these reference must be material to U.S. claims which LG also did not analyze. These conclusory statements are not only insufficient to satisfy the pleading standard, but are also factually incorrect, as the PTO determined that the references at issue did not preclude issuance of at least U.S. Patent No. 9,794,621, and LG has failed to explain why the other patents in the chain would fare differently.

Further, LG cannot show that there was specific intent to deceive the PTO, because the references were actually disclosed to the PTO. Accordingly, there can be no reasonable inference that TVnGO was attempting to hide the references from the PTO when **the references were submitted** and ultimately considered.

Thus, LG should not be permitted to proceed on this counterclaim or affirmative defense. **[*5]**

II. Legal Background

"To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true to 'state a claim to relief that is plausible on its face.'" *Ashcroft v. Iqbal, 556 U.S. 662, 677 (2009)* (quoting *Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007)*). Although a Court must accept all factual allegations in a complaint as true, that precept is "inapplicable to legal conclusions" and "threadbare recitals of the elements of a cause of action, supported by mere conclusory statements do not suffice." *Id.* "A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Twombly, 550 U.S. at 556*.

Whether inequitable conduct has been adequately pled is a question of Federal Circuit law. *Cen. Admixture Pharmacy Srvs., Inc. v. Advanced Cardiac Sols., P.C., 482 F.3d 1347, 1356 (Fed. Cir. 2007)*; *Exergen Corporation v. Wal-Mart Stores, Inc., 575 F.3d 1312, 1312 (Fed. Cir. 2009)*. "A claim of inequitable conduct in acquiring or maintaining a patent has two elements: intent to deceive and materiality of the omission/misrepresentation to the PTO." *Eagle View Techs., Inc. v. Xactware Sols., Inc., 325 F.R.D. 90, 93 (D.N.J. 2018)*; *Exergen, 575 F.3d at 1330*.

The Federal Circuit, **[*6]** concerned that inequitable conduct claims "ha[ve] been overplayed [are] appearing in nearly every patent suit, and [are] cluttering up the patent system," tightened the pleading standard for inequitable conduct in order to "redirect a doctrine that has been overused to the detriment of the public." *Therasense, 649*

F.3d at 1290. Consequently, the Federal Circuit imposes a heightened pleading standard when addressing inequitable conduct, requiring it be pled with specificity and particularity. Exergen, 575 F.3d at 1326. Therefore, "a properly pled rule 12(b)(6) motion of inequitable conduct calls for sufficient and particularized facts that allow the court to reasonably infer the challenged party is liable for intent to deceive the PTO by a material representation / omission." Eagle View Techs., 325 F.R.D. at 94-95.

There are three steps to the inquiry: 1) the Court must identify the elements of the inequitable conduct claim; 2) the Court must strike all conclusory allegations; and 3) finally the Court must evaluate the particularity of the pled elements of "who, what, where, when, how and why to determine if they reasonably infer that discovery will reveal evidence" of intent **[*7]** to deceive. Eagle View Techs., 325 F.R.D. at 94-95 (quoting Taro Pharmaceuticals N.A. et al. v. Suven Life Sciences, Ltd., No. 11-2352, 2012 WL 2513523 at *4 (D.N.J. June 28, 2012) (citing Fowler v. UPMC Shadyside, 578 F.3d 203, 213 (3d. Cir. 2009)).

With regard to materiality, *Therasense* clarified that it must be shown that "but for" the misrepresentation or omission, the patent would not have issued. Therasense, 649 F.3d at 1291-92. This district has held that the logic of *Therasense* applies to a heightened pleading standard. *Mycone Dental Supply Co. v. Creative Nail Design, Inc.*, No. CIV.A. 11-4380 JBS, 2013 WL 3216145, at *6 (D.N.J. June 24, 2013).

Likewise, Federal Rule Civil Procedure 12(f) provides that the court may "strike from a pleading an insufficient defense or any redundant, immaterial, impertinent, or scandalous matter." In re Gabapentin Patent Litig., 649 F. Supp. 2d 340, 346 (D.N.J. 2009). A motion to strike an affirmative defense pursuant to Rule 12(f) at the pleading stage is subject to the same standards as a motion to dismiss pursuant to Rule 12(b)(6). *Teva Neuroscience, Inc. v. Watson Labs., Inc.*, No. 10-5078 JLL, 2011 WL 741250, at *1 (D.N.J. Feb. 24, 2011).

An affirmative defense is also legally insufficient if "it is not recognized as a defense to the cause of action." Tonka Corp. v. Rose Art Indus., Inc., 836 F. Supp. 200, 217 (D.N.J. 1993) (internal citations omitted). Accordingly, at the pleading stage, if the affirmative defense asserted **[*8]** could not prevent recovery "under any pleaded or inferable set of facts," the affirmative defense can be stricken. *FTC v. Hope Now Modifications, LLC*, No. CIV. 09-1204 JBS/JS, 2011 WL 883202 at *1 (D.N.J. Mar. 10, 2011); *see also* In re Gabapentin Patent Litig., 649 F. Supp. 2d 340, 346 (D.N.J. 2009) (quoting Glenside West Corp. v. Exxon Co. U.S.A., 761 F. Supp. 1100, 1115 (D.N.J. 1991))("[W]hen a defense is legally insufficient under any set of facts which may be inferred from the allegations of the pleading" a motion to strike should be granted).

III. Factual Background

LG argues that during the prosecution of the patents-in-suit various unspecified individuals were aware of certain prior art references and intentionally did not disclose them to the PTO. LG identifies a reference that was cited during the prosecution of a Japanese TVnGO patent application, JP 2003-018575 ("the '575 patent"), and a set of references that were identified during the prosecution of a European TVnGO application, US2001/003212, US2002/056129, and XP002945609 (collectively, the "EP Publications"). The following addresses the factual background of the relevant events. [1]

The application that led to U.S. Patent No. 8,132,220 (the "220 patent") ("'220 application") was filed with the PTO on July 6, 2007 by the Nath Law Group. *See* Dkt. 001 ("Compl."), Ex. A. The applications that led to the U.S.

---

[1] TVnGO is mindful that a court considering a motion to dismiss generally relies on the complaint, exhibits attached thereto and matters of public record. Sands [*9], v. McCormick, 502 F.3d 263, 268 (3d Cir. 2007). However, the court may also consider "undisputedly authentic document[s] that a defendant attaches as an exhibit to a motion to dismiss if the plaintiff's claims are based on the [attached] document." Pension Benefit Guar. Corp. v. White Consol. Industries, Inc., 998 F.2d 1192, 1196 (3d Cir. 1993). In addition, "documents whose contents are alleged in the complaint and whose authenticity no party questions, but which are not physically attached to the pleading, may be considered." Pryor v. Nat'l Coll. Athletic Ass'n, 288 F.3d 548, 560 (3d Cir. 2002).

Patent Nos. 9,124,945, 9,392,339, and ***9,407,969*** were continuation of the '220 application and were all filed on December 23, 2011. *See* Compl., Exs. B, C, and D.

On September 23, 2011, after more than four years of prosecution, a notice of allowance was issued in the '220 application. Ex. A [2]. Subsequently, **[*10]** on December 23, 2011, the applicant filed a response including an IDS, disclosing, among other things, the '575 patent. Ex. B. The response also included an amendment as well as the Issue Fee. *Id.* On December 28, 2011, the examiner issued a "Miscellaneous Communication to Applicant - No Action Count" indicating that the December 23 IDS was put in the file but not considered. Ex. C. The '220 patent issued on February 15, 2012. Ex. D.

On November 15, 2011, during the prosecution of an EPO patent, the EPO identified several references including the EP Publications identified by LG.

The application that led to U.S. Patent No. 9,794,621 (the "'621 patent"), and that ultimately claims priority to the '220 application, was filed on November 25, 2015 by Cooper Dunham. Ex. *See* Compl., Ex. E. Cooper Dunham was given control of TVnGO's US patent prosecution duties around February 19, 2015. On October 5, 2016, the PTO issued a notice of allowance in the application that matured into the '621 patent indicating the claims were in a condition for allowance. Ex. E. Subsequently, on January 26, 2017, TVnGO filed a Request for Continued Examination ("RCE"). Ex. F. The RCE was filed with the **[*11]** express purpose of having the PTO consider certain references that were included with accompanying IDSes. Those IDSes included the '575 patent and the European Publications, i.e. each of the references LG asserts were improperly withheld from the PTO. Ex. G. The examiner considered each of the references. Ex. H. Then, on February 10, 2017, without issuing an intervening office action or requiring any amendment to the pending claims, the examiner issued a notice of allowance. Ex. I. The issue fee was paid, and the '621 patent issued on October 17, 2017. *See* Compl., Ex. E Each of the references identified by LG are listed on the face of the '621 patent as having been considered by the PTO. *Id.*

IV. Arguments

LG's inequitable conduct counterclaim and affirmative defense should be dismissed and stricken. LG has not and cannot show the purportedly undisclosed references are material, LG's generalized claims are not pled with particularity, and LG cannot identify facts sufficient to support a reasonable inference that any individual had specific intent to deceive the PTO. Accordingly, LG's counterclaim and affirmative defenses cannot stand.

A. LG Has Not Pled Facts To Support [*12] Materiality

LG has not and cannot show that the references at issue were material to the patents-in-suit. It is not sufficient to show that the reference is highly material, but rather LG must show that the patents would not have issued "but for" the alleged omission. *Therasense*, 649 F.3d at 1291-92.

Here, LG provided no evidence that the references were material to the patentability of the patents-in-suit. Instead, LG makes conclusory allegations that the references are material merely because they were identified in foreign patent prosecutions. *See, e.g.*, Dkt. 16 ("Answer"), *Page 20 P 21* [3]. This is insufficient to support its claims for two reasons.

First, LG has failed to explain why the references preclude the patentability of the patents-in-suit, including any explanation why the references precluded issuance of the foreign patents, how the standards for patentability in those jurisdictions applies to U.S. patents, or how the foreign claims relate to the claims of the patent-in-suit. **[*13]**

---

[2] Unless otherwise specified, all citations to Exhibits are to the exhibits identified in the Declaration of Timothy H. Caine filed in support of this motion.

[3] Defendants restarted the paragraph numbers in their Answer on page 16. For clarity we will denote citations to the Answer to show the page number and paragraph in the following forms Page 1 P3 or P.1 P3.

Moreover, LG made no attempt to distinguish claims of the patents-in-suit from each other - or provide any claim analysis whatsoever.

Second, to the extent LG can rely on these generalizations that all of the patents are indistinguishable, its argument cannot succeed because the PTO did in fact review these references and determined that they are not material to the patentability of the patents-in-suit. *Sepracor Inc. v. Teva Pharm. USA, Inc.*, No. 09-CV-01302-DMC, 2010 WL 2326262, at *5 (D.N.J. June 7, 2010)(dismissing inequitable conduct claims without leave to amend because the prior art in question was "before the examiner, and he was entitled to reach his own conclusions on the study"). During prosecution of the '621 patent, TVnGO properly identified all of the purportedly undisclosed references. Ex. G. The examiner considered each of the references and determined that the claims were still patentable - without issuing an office action or requiring any amendment to the claims of the '621 patent. Ex. H. LG has failed to establish how or why the claims of the other patents-in-suit would have fared differently. Therefore, it is not only implausible, but impossible that "but for" the alleged omissions, the patents would not **[*14]** have issued. *See* Eagle View Techs., 325 F.R.D. at 94-95.

Accordingly, not only has LG failed to plead facts to show materiality, it cannot succeed on these claims because the PTO already determined that references are not material to the patentability of the patents-in-suit.

B. LG's Generalized Pleading of Inequitable Conduct Is insufficient

LG's inequitable conduct claims should be dismissed because LG has not pled its counterclaim or affirmative defenses with particularity. To support these claims, LG must allege facts identifying the elements of the inequitable conduct claim and the "elements of who, what, where, when, how and why to determine if they reasonably infer 'that discovery will reveal evidence of the necessary element [here, intent to deceive].'" Taro Pharmaceuticals, 2012 WL 2513523 at *4 (citing Fowler, 578 F.3d at 213); *see also* Eagle View Techs., 325 F.R.D. at 94-95.

LG has failed in each respect.

1. Who

LG has not identified which specific individuals it contends were aware of each reference and/or which specific individual allegedly failed to disclose each specific reference. *Id. Exergen* requires a party bringing an inequitable conduct claim to identify "the **[*15]** specific individual associated with the filing or prosecution of the application . . . who ...knew of the material information and deliberately withheld or misrepresented it." Exergen, 575 F.3d at 1329.

Rather, LG asserts sweeping and generalized statements naming every possible person associated with the prosecution of TVnGO's patent applications. For example, in paragraph 14, LG states

> Upon information and belief, one or more of the participants in the prosecution of the applications that led to the Patents-in-Suit, including, without limitation, Yaakov Merlin, the named inventor of the Patents-in-Suit, patent attorneys working for TVnGo, including Mr. Klima and Mr. Ivan S. Kavrukov, or other attorneys at the laws firms of The Nath Law Group and/or Cooper & Dunham LLP, and/or other individuals who assisted or participated in the preparation, filing, or prosecution of the Patents-in-Suit...

Answer, P. 18, P14. This is insufficient because LG has failed to identify a specific person as having knowingly and intentionally deceived the PTO. Exergen, 575 F.3d at 1329-30; *see also* Hood v. United States, 659 F. App'x 655, 666 (Fed. Cir. 2016) (Dismissing a complaint because plaintiffs did not identify individuals **[*16]** who had committed the fraudulent conduct or facts from which the court could infer that the fraudulent action was made with the "requisite state of mind.").

2. How and Why

LG also failed to plead with particularity how the references were material and not cumulative. It is insufficient to state generally that the withheld references are "material" and "not cumulative," but "not identify the particular claim

limitations, or combination of claim limitations, that are supposedly absent from the information of record. Such allegations are necessary to explain both 'why' the withheld information is material and not cumulative, and 'how' an examiner would have used this information in assessing the patentability of the claims." *Exergen, 575 F.3d at 1329-30* (citing *Larson Mfg. Co. v. Aluminart Prods. Ltd., 559 F.3d 1317, 1333 (Fed. Cir. 2009)* (finding information cumulative to art of record that taught the "same combination" of claim limitations taught in withheld reference)); *Teva Neuroscience, 2011 WL 741250, at *3-4*.

Here, LG's claims are entirely conclusory as it fails to identify how each reference applies to each claim of the patents-in-suit beyond a general description of the technology claimed in the patents. Instead, LG relies **[*17]** solely on conclusory statements as to whether the purportedly undisclosed references are material. *See* Answer, P. 19, P16 ("Each claim of the Patents-in-Suit, in some form, recites a web link, or URL, indicating a website where content that is associated with an overlay is stored, and that upon the user interacting with the overlay, data is received from the specified internet address and the content is displayed on the TV."); Answer, P. 22, PP30, 38 (stating that unspecified persons knew the purportedly undisclosed references included non-cumulative information without analysis).

3. When

LG must specifically plead when the individuals knew about the references and consequently when the omission took place. *Exergen, 575 F.3d at 1329-30*. Inequitable conduct claims cannot proceed if there is no evidence that the identified individuals were aware of the purportedly undisclosed references. *See generally Eagle View Techs., 325 F.R.D. 80*. Here, however, LG attempted to generalize the accusations.

With regard to the '575 patent, LG does not state when any specific individuals became aware of the references but rather states:

> On information and belief, on September 26, 2011, TVnGO submitted **[*18]** Written Argument to the Japanese Patent Office in response to the April 5, 2011 Notification of Reasons for Refusal, arguing against the '575 Publication. Thus, the '575 Publication and its material relevance to the patentability of the Patents-in-Suit were known to one or more of the participants in the prosecution of the Patents-in-Suit prior to the issue date of each of the Patents-in-Suit. The '220 Patent has the earliest issue date - March 6, 2012 - among the Patents-in-Suit.

Answer, P. 20, P21. Nowhere does LG state when any individual related to the U.S. prosecution became aware beyond the filing of the IDS. For example, LG does not state that anyone from the Nath Group or Cooper Dunham was ever involved in the Japanese prosecution or that they were informed of proceedings in that foreign jurisdiction.

Similarly, with regard to the European Publications, LG does not state when any specific individuals became aware of the references. Rather, LG assumes that the knowledge from the foreign prosecutions was somehow imputed to the prosecuting attorneys at a different firm at an undisclosed time. Answer, P. 25, P40.

This is insufficient to plead any inequitable conduct claims **[*19]** because the prosecuting attorneys must have knowledge of the purportedly undisclosed references to support a claim. *Eagle View Techs., 325 F.R.D. at 93*.

C. LG Has Not And Cannot Plead Facts To Infer Intent

LG's inequitable conduct counterclaim and affirmative defense should be dismissed because LG has not and cannot plead facts to support a *reasonable* inference that TVnGO intentionally withheld these references. In fact, the opposite is true - the references were disclosed and were actually considered.

To succeed on this claim, LG must ultimately show direct evidence of specific intent or evidence that specific intent to deceive was "the single most reasonable inference able to be drawn" and that the evidence "must be sufficient to require a finding of deceitful intent in light of all of the circumstances." *Star Sci., Inc. v. R.J. Reynolds Tobacco Co., 537 F.3d 1357, 1366 (Fed. Cir. 2008)*; *Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 873*

(Fed. Cir. 1998). "Hence, when there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found." Therasense, 649 F.3d at 1290-91 (citing Scanner Techs. Corp. v. ICOS Vision Sys. Corp., 528 F.3d 1365, 1376 (Fed. Cir. 2018)).

To plead this claim, LG must plead facts such that a court may **[*20]** reasonably infer that a specific individual misrepresented information to the PTO with intent to deceive. Exergen, 575 F.3d at 1328-29. "A reasonable inference is one that is plausible and that flows logically from the facts alleged." Exergen, 575 F.3d at 1329 n.5. "Pleading on 'information and belief' is permitted under Rule 9(b) when essential information lies uniquely within another party's control, but only if the pleading sets forth the specific facts upon which the belief is reasonably based." Exergen, 575 F.3d at 1330.

Here, LG has not pled any facts to show intent and, even if LG had pled some facts to show intent, LG cannot plead facts to support a *reasonable* inference that any specific individual had specific intent to deceive the PTO.

First, LG has not alleged any facts to support its contention that there was specific intent by anyone - let alone a specific individual. In fact, LG's entire basis for specific intent is predicated on "information and belief." The only time LG references intent in its answer and counterclaims are in paragraphs 32 and 40 which state for the '575 patent and European Publications, respectively:

> Upon information and belief, the **[*21]** participants in the prosecution of the applications that led to the Patents-in-Suit failed to disclose to the PTO the '575 Publication and/or its material relevance to the patentability of the Patents-in-Suit with the intent of deceiving the PTO.

Answer, P. 23, P32; *see also* Answer, P.25, P40. As explained in *Exergen*, a claim for inequitable conduct is not properly pled if it does not explain the factual basis supporting the "information and belief. Exergen, 575 F.3d at 1330. Accordingly, LG's claim is entirely conclusory and inadequately pled.

Second, there is no reasonable inference that any one at or on behalf of TVnGO intended to deceive the PTO. After removing the conclusory allegations, LG's claim is predicated on the contention that someone at or on behalf of TVnGO knew about these purportedly undisclosed references and then intentionally withheld them with specific intent to deceive the PTO because they knew they were material. Not only that, with regard to the '575 patent, LG alleges that TVnGO knew about the reference and intentionally filed an IDS with the hope that the PTO would not review it.

Any inference that someone at TVnGO intentionally tried to deceive **[*22]** the PTO based on the these facts would be *unreasonable* because the references were in fact disclosed. It is illogical to suggest that a patent prosecutor would intentionally not check a box on the IDS form hoping to trick the examiner into not reviewing the references. Under this scenario, the references would not be considered but would be in the file wrapper for opposing parties to collect and later assert as a basis for invalidity. In effect, LG is arguing that attorneys for TVnGO intentionally presented a roadmap for future challengers. Otherwise stated, if TVnGO had specific intent to deceive, there is no reason why they would attempt to disclose the references rather than just withholding them. Accordingly, there can be no *reasonable* inference that TVnGO had specific intent to deceive the PTO.

V. Conclusion

For the foregoing reasons, TVnGO respectfully requests that the court dismiss LG's Eleventh Counterclaim and strike LG's Thirteenth Affirmative Defense concerning inequitable conduct with prejudice pursuant to Federal Rule of Civil Procedure 12(b)(6) and 12(f), respectively.

Dated: October 19, 2018

Respectfully submitted,

By: /s/ Matthew T. Eyet, Esq.

Renee Preston

[*23] Matthew T. Eyet, Esq.
NJ Supreme Court I.D. No. 018872010

SANDELANDS EYET LLP
1545 U.S. Highway 206, Suite 304
Bedminster, NJ 07921

meyet@se-ip.com
908-470-1200
Charles E. Cantine, Esq. (Pro Hac Vice)
Joseph Diamante, Esq. (Pro Hac Vice)
Timothy H. Caine, Esq.

KING & SPALDING LLP
1185 Avenue of the Americas, 35th Floor
New York, NY 10036
212-556-2100

Attorneys for Plaintiff TVnGO Ltd. (BVI)

End of Document

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Markman Opening Brief

Title

Declaration of W. LEO HOARTY with Ex. 1

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Answer to Complaint

Title

DEFENDANTS LG ELECTRONICS INC. AND LG ELECTRONICS U.S.A., INC.'S FIRST AMENDED ANSWER to Complaint with JURY DEMAND , COUNTERCLAIM against TVnGO LTD. (BVI) by LG ELECTRONICS, INC.,, LG ELECTRONICS U.S.A., INC..(WALSH, LIZA) (Entered: 08/16/2019)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Markman Opening Brief

Title

MARKMAN OPENING BRIEF BY DEFENDANTS LG ELECTRONICS INC. AND LG ELECTRONICS U.S.A., INC. (Attachments: # 1 Declaration of W. LEO HOARTY with Ex. 1, # 2 Declaration of COLLIN W. PARK, # 3 Exhibit A-M TO PARK DECLARATION)(WALSH, LIZA) (Entered: 09/23/2019)

Click to view PDF document

End of Document

Samsung
Ex. 1031 - Page 179

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Markman Opening Brief

Title

MARKMAN OPENING BRIEF BY PLAINTIFF TVnGO LTD. (BVI) (Attachments: # 1 Declaration of Charles E. Cantine, # 2 Exhibit 1 through 9 to Cantine Declaration)(EYET, MATTHEW) (Entered: 09/23/2019)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Motion to Dismiss

Title

MOTION to Dismiss Count Eleven of Defendants' Counterclaims, and Motion to Strike Defendants' Thirteenth Affirmative Defense by TVnGO LTD. (BVI). Responses due by 11/5/2018 (Attachments: # 1 Brief, # 2 Declaration of Timothy H. Caine, Esq., # 3 Exhibit A, # 4 Exhibit B, # 5 Exhibit C, # 6 Exhibit D, # 7 Exhibit E, # 8 Exhibit F, # 9 Exhibit G, # 10 Exhibit H, # 11 Exhibit I, # 12 Text of Proposed Order, # 13 Certificate of Service)(EYET, MATTHEW) (Entered: 10/19/2018)

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Markman Response Brief

Title

Supplemental Declaration of W. Leo Hoarty

Click to view PDF document

End of Document

Renee Preston

Tvnqo Ltd. (Bvi)

2:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Complaint

Title

Exhibit D

Click to view PDF document

End of Document

Renee Preston

Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al

1:18cv10238

US District Court for the District of New Jersey

June 6, 2018, Filed

Reporter

State: US-NJ

Type: Markman Opening Brief

Title

Exhibit 1 through 9 to Cantine Declaration

Click to view PDF document

End of Document

Renee Preston

LexisNexis

User Name: Renee Preston
Date and Time: Tuesday, July 26, 2022 7:29:00 AM EDT
Job Number: 176006193

Documents (3)

1. *TVnGO Ltd. (BVI) v. LG Elecs., Inc., 2020 U.S. Dist. LEXIS 67598*

Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
Cases	-None-

2. *TVnGO Ltd. v. LG Elecs., Inc., 2019 U.S. Dist. LEXIS 86618*

Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
Cases	-None-

3. *TVnGO Ltd. (BVI) v. LG Elecs. Inc., 861 Fed. Appx. 453*

Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
Cases	-None-

Positive
As of: July 26, 2022 11:29 AM Z

TVnGO Ltd. (BVI) v. LG Elecs., Inc.

United States District Court for the District of New Jersey

April 16, 2020, Decided; April 17, 2020, Filed

Civil No. 18-10238 (RMB/KMW)

Reporter
2020 U.S. Dist. LEXIS 67598 *; 2020 WL 1899781

TVnGO LTD. (BVI), Plaintiff, v. LG ELECTRONICS, INC. and LG ELECTRONICS U.S.A., INC., Defendants.

Subsequent History: Affirmed by *TVnGO Ltd. (BVI) v. LG Elecs. Inc., 2021 U.S. App. LEXIS 19106 (Fed. Cir. June 28, 2021)*

Prior History: *TVnGO Ltd. v. LG Elecs. Inc., 2019 U.S. Dist. LEXIS 86618, 2019 WL 2223672 (D.N.J. May 23, 2019)*

Core Terms

overlay, activation, patent, indefinite, specifications, display, inconsistencies, criterion, terms, signal, user, Internet, reasonable certainty, television, invention, generating, intrinsic, channel, inform, words

Counsel: **[*1]** For Plaintiff: Matthew T. Eyet, Esq., EYET LAW LLC, New Brunswick, New Jersey; Charles E. Cantine, Esq., Joseph Diamante, Esq., DUNLAP BENNETT & LUDWIG PPLC, New York, New York.

For Defendants: Liza M. Walsh, Esq., Selina M. Ellis, Esq., WALSH PIZZI O'REILLY FALANGA LLP, Newark, New Jersey; Natalie Bennett, Esq., Collin W. Park, Esq., Eric Kraeutler, Esq., Ghee J. Lee, Esq., MORGAN, LEWIS & BOCKIUS LLP, Washington, D.C.

Judges: Renée Marie Bumb, United States District Judge.

Opinion by: Renée Marie Bumb

Opinion

BUMB, UNITED STATES DISTRICT JUDGE:

In this patent infringement suit, Plaintiff TVnGO Ltd. (BVI) asserts that Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, "LG"), are infringing five of TVnGO's patents[1] which claim methods and devices that make televisions "smart"-- i.e., able to display both television content and internet streaming content. Presently before the Court is the issue of indefiniteness, which LG raised in connection with the Court's claim construction inquiry. The Court has carefully considered the parties' pre-hearing submissions and post-hearing briefs, the parties' presentations made at the claim construction hearing held on January 8, 2020, as well as supplemental **[*2]** briefing which this Court ordered on March 6, 2020. For the reasons stated herein, the Court holds that '220 Patent claims 1, 9, 10, 13, 17, and 20; '945 Patent claims 1, 4, 8, 9, 12, 15, 19, 21; '969 Patent claims 1, 9, 10, 13, 17 and 20; '339 Patent claims 1, 4-7, 12-15 and 18; and '621 Patent claims 1, 4, 9, 11 are indefinite, and therefore not amenable to construction.[2]

I.

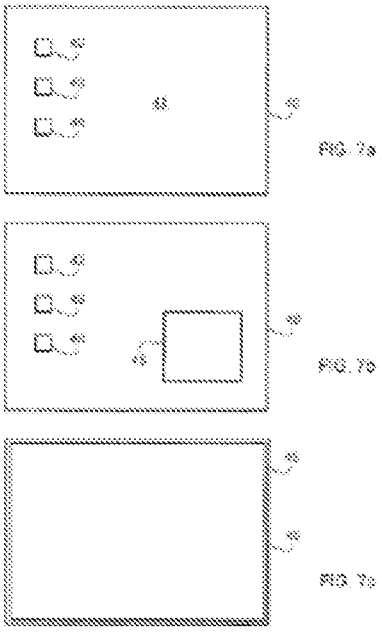
According to TVnGO, the main inventive feature of its technology to which the Patents-in-Suit are addressed is the generation and display of "overlays" which appear on a user's (i.e., a person's) television screen, thereby creating a user-friendly mechanism through which a

---

[1] The Patents-in-Suit are U.S. Patent Nos. 8,132,220; 9,124,945; 9,392,339; ***9,407,969***; and 9,794,621, respectively, the '220 Patent, the '945 Patent, the '339 Patent, the '969 Patent and the '621 Patent. Each of the '945, '339, and '969 patents are continuations of the '220 Patent. The '621 Patent is a continuation of the '969 Patent.

[2] In light of this holding, the Court need not reach, and therefore does not reach, the issue of whether the terms "combiner unit" and "combiner circuit", as used in '220 Patent claims 1, 13, and 17; '945 Patent claims 1-10, 12, and 18; '339 Patent claims 1-17, 19, 20; and '969 Patent claims 1, 13, and 17 are indefinite. [See TVnGO's Post-Hearing Brief, Dkt No. 75, p. 3]

user can simultaneously view broadcast TV content and Internet content. [Transcript p. 53, 60] Thus, for example, in Figures 7a, 7b and 7c of the Patents-in-Suit, which depict a television set (item 40), items 42 through 45 are overlays, or icons[3] containing Internet content, and item 41 is broadcast TV content:



According to the specifications, if a user wishes to view the content represented by a particular overlay-- for example, item 42-- she may use a particular key on her remote control to select the desired overlay, which will result in the display of a secondary window, item 45. Engaging the **[*3]** same key for a second time will enlarge the secondary window to occupy substantially the whole area of the television screen, as shown in Figure 7c. Engaging the same key for a third time will cause the television screen display to revert to the situation shown in Figure 7a. ['220 Patent, 7:25-50; '945 Patent, 7:35-60; '339 Patent, 7:28-50; '969 Patent, 7:35-60; '621 Patent, 7:43-65]. The parties dispute whether the Patents-in-Suit "particularly . . . and distinctly" disclose, *35 U.S.C. § 112(b)*, how the patented technology functions to produce items 42 through 45.

The claim terms primarily at issue are "overlay activation criterion" and "overlay activation signal."[4] Copies of the Patents-in-Suit are attached to this Opinion as Exhibits A through E.[5]

II.

Patent claims must "particularly point[] out and distinctly claim[] the subject matter" of the invention. *35 U.S.C. § 112(b)*. If a claim does not do so, it is invalid as indefinite. *Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 902, 134 S. Ct. 2120, 189 L. Ed. 2d 37 (2014)*. "[A] patent claim is indefinite if, when 'read in light of the specification delineating the patent, and the prosecution history, the claim fails to inform, with reasonable certainty, those skilled in the art[6] about the scope of the invention.'" *BASF Corp. v. Johnson Matthey Inc., 875 F.3d 1360, 1365 (Fed. Cir. 2017)* (quoting Nautilus). "'The internal coherence and context assessment of the patent, and whether it conveys **[*4]** claim meaning with reasonable certainty, are questions of law.'" *United Access Techs., LLC v. AT & T Corp., 757 F. App'x 960, 969 (Fed. Cir. 2019)* (quoting *Teva Pharms. USA, Inc. v. Sandoz, Inc., 789 F.3d 1335, 1342 (Fed. Cir. 2015)*).

Likewise, claim construction is an issue of law, *Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996)*, and "[a] determination that a patent claim is invalid for failure to meet the definiteness requirement of *35 U.S.C. § 112*, ¶ 2 is a conclusion that is drawn from the court's performance of its duty as the construer of patent claims." *Fisher-Price, Inc. v. Graco Children's Prods., 154 Fed. Appx. 903, 906 (Fed. Cir. 2005)* (internal citation and quotation omitted); see also, *Biosig Instruments, Inc. v. Nautilus, Inc., 783 F.3d 1374, 1377 (Fed. Cir. 2015)* ("In the face of an allegation of indefiniteness, general principles of claim construction apply.").[7]

---

[3] At the claim construction hearing, TVnGO explained, by way of example, that the icon could take the form of a commonly recognized logo, such as the Netflix logo. [Transcript p. 60, 95, 100]

[4] The term "special overlay activation signal" appears in the '945 and '621 Patents, however the parties make no separate, independent arguments with respect to the word "special." Thus, the parties' arguments, and the Court's analysis, applies equally to both "overlay activation signal" and "special overlay activation signal."

[5] See also Docket Entries 1-1 ('220 Patent), 1-2 ('945 Patent), 1-3 ('339 Patent), 1-4 ('969 Patent), and 1-5 ('621 Patent).

[6] The parties have stipulated on the record that, for the purposes of the issues addressed herein, the parties' differing formulations of a person skilled in the art ("POSA") have no material impact on claim construction. [Transcript, p. 16-17]

[7] TVnGO asserts that the Court should defer its indefiniteness ruling "until TVnGO has had an opportunity to take fact discovery." [Post-hearing brief, Dkt No. 75, p. 3; Supplemental brief, Dkt. 81, p. 9-10] The Court concludes, however, that

III.

In conducting the indefiniteness inquiry, the Court considers: the language of the claims; the specifications; and the prosecution histories of the Patents-in-Suit. *BASF Corp., 875 F.3d at 1365* (quoting Nautilus). Section A considers the claims and the specifications of the Patents-in-Suit. Section B addresses the prosecution histories.

A.

As LG has persuasively demonstrated, the use of the terms "overlay activation criterion" and "overlay activation signal"-- neither of which are terms of art, nor defined by the specifications[8] -- create irreconcilable inconsistencies into the Patents-in-Suit. These inconsistencies manifest not only when a POSA views each Patent-in-Suit individually ("intra-patent inconsistencies"), **[*5]** but as well as when a POSA attempts to understand the terms across the span of the Patents-in-Suit ("inter-patent inconsistencies"). Consequently, these inconsistencies render each Patent-in-Suit indefinite.

Intra-Patent Inconsistencies

Three intra-patent inconsistencies exist: (1) the '220 and '969 Patents both have the same inconsistency; (2) the '945 and '621 Patents both have another inconsistency; (3) and the '339 Patent has yet another inconsistency.

First, independent claims 1 and 13 of each of the '220 and '969 Patents use the term "overlay activation criterion" in a manner that is inconsistent with the use of that same term in dependent claims 9 and 20, and the specifications of both patents. In claims 1 and 13, "overlay activation criterion" must necessarily come from the Internet because the claim states that "overlay activation criterion" is a component of the "overlay-enabling digital data" which data, the claim explicitly states, is provided "over the Internet." ['220 Patent, 8:61-9:7, 10:25-40; '969 Patent, 9:7-20, 10:36-50] However, claims 9 and 20, as well as the specifications, state that "user command information" may be a component of "overlay activation criterion" and that such information is provided at the user's premises and not over **[*6]** the Internet. ['220 Patent, 7:2-6, claim 3, claim 15; '969 Patent, 7:10-15, claims 3 and 15] Thus, the intrinsic evidence presents a POSA with irreconcilably inconsistent information: the '220 and '969 Patents indicate that "overlay activation criterion" comes from the Internet and simultaneously not from the Internet-- i.e., from the user's premises. To state it more to the point, the Patents fail to inform a POSA of the invention's scope with reasonable certainty.

Second, the claims of the '945 and '621 Patents are internally inconsistent with their own specifications. The claims in which "overlay activation signal" appear refer to a signal that causes overlays stored in memory to be displayed. [See, e.g., '945 Patent, claim 1 at 9:23-26, claim 12 at 10:35-38; '621 Patent, claim 1 at 9:21-24] However, the specifications of both patents use "activate" to refer only to the pressing of a remote control key corresponding to a displayed overlay thereby "activating" the overlay to display the IP content to which the overlay corresponds. ['945 Patent, 7:16-34, 45-49; '621 Patent, 7:25-42, 52-57] Thus, a POSA looking at either the '945 Patent or the '621 Patent cannot know what happens upon receipt of an overlay activation signal because the patents teach two different results. A POSA is left to wonder, or **[*7]** in other words, is confused: does the overlay activation signal result in the display of a stored overlay, or does it result in the display of IP content? The patents provide no guidance as to how a POSA could confidently choose between the two possibilities. See *Media Rights Techs., Inc. v. Capital One Fin. Corp., 800 F.3d 1366, 1371 (Fed. Cir. 2015)* (explaining that indefiniteness results when "no informed and confident choice is available among the contending definitions.").

Third, and similarly, the '339 Patent's use of the term "overlay activation criterion" is inconsistent with the meaning of "activating" an overlay in its own specification. Claim 1 of the '339 Patent states that an

---

discovery in this particular case would not be helpful to the Court's legal inquiry given the nature of the claims' indefiniteness. As discussed herein, the claims, as written, contain inherent, irreconcilable inconsistencies. Even if, as LG hypothesized at the claim construction hearing, discovery were to reveal that persons skilled in the art at LG subjectively understood what TVnGO's patents claimed [Transcript, p. 66-67], that evidence could not overcome the legal conclusion that the claims, as drafted, and read in light of the specification and prosecution history, do not inform a POSA, with a reasonable amount of certainty, the scope of the invention.

[8] TVnGO does not disagree with these findings. Contrast *Phillips, 415 F.3d at 1315* ("the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.") (internal citation and quotation omitted).

overlay activation criterion causes the display of overlays[9] whereas the '339 Patent's specification, like the specifications of the '945 and '621 Patents, indicates that activating an overlay results in the display of IP content. ['339 Patent, 7:11-27]

TVnGO's attempts to give clarity to the scope of the inventions are unpersuasive. Rather than reconcile inconsistencies, or provide clear answers to the Court's questions-- neither of which TVnGO has been able to do, despite several opportunities to do so-- TVnGO asks the Court to reject LG's arguments because they are merely "attorney argument" "unsupported by admissible evidence." **[*8]** [Supplemental Brief, Dkt. 81, p. 2] LG's arguments, however, are supported by the Patents themselves, which, of course, are admissible evidence. The Court has endeavored to construe the claims, most of which TVnGO contends needs no construction because their meaning is plain. Try as it might, the Court has been unable to do so. Having considered the claims, specifications, and prosecution histories of the Patents-in-Suit, as set forth supra (and infra), the Court cannot construe the claims with any confidence. See also, *United Access Techs., 757 F. App'x at 969* ("The internal coherence and context assessment of the patent, and whether it conveys claim meaning with reasonable certainty, are questions of law.").

Inter-Patent Inconsistencies

As this Court's above discussion of the '339 and '621 Patents has previewed, "overlay activation criterion" and "overlay activation signal" are used interchangeably between the '339 Patent and the '621 Patent to achieve the same result: display of an overlay. [See '339 Patent, claim 1, line 8-10; '621 Patent, claim 1, lines 21-24] However, the specifications provide different meanings for these two words. "Criterion," according to the specifications, means condition, such as time and channel information [see, e.g., '339 Patent 3:61-67; '621 Patent 4:26-28], whereas "signal" **[*9]** means a selection or indication from the user [see, e.g. '339 Patent 4:64-67; '621 Patent 5:8-12]. According to the specifications, and as TVnGO states in its brief, the "criterion" comes from the Internet, whereas the "signal" comes from the user via the remote control. [Dkt. No. 75, p. 8, 10, 14] The simultaneous use of two different words with different meanings to achieve the same result-- display of an overlay-- produces an irreconcilable inconsistency within the Patents-in-Suit which cannot inform a POSA, with reasonable certainty, the scope of the invention. Because "no informed and confident choice is available among the contending definitions," *Media Rights Techs., Inc., 800 F.3d at 1371*, the claim terms are indefinite. Contrast *Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005)* (en banc) ("Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims.").

Similarly, in the '220 Patent, for example, when the overlay activation criterion is met, the result is the generation of an overlay. ['220 Patent, claim 1, lines 9-11; see also '969 Patent, claim 1, lines 21-24] In contrast, however, in the '339 Patent, the result of the overlay activation criterion being met is the display of an overlay. ['339 Patent, claim 1, lines 8-10] TVnGO **[*10]** maintains this is exactly as it should be-- that "when we say 'generate' [an overlay] what we mean is display." [Transcript, p. 56; see also p. 98, 108 (using "display" and "generate" interchangeably); Dkt. 75, p. 13 ("When the claim language describes displaying the overlay, it is referring to generating the overlay."); Dkt. No. 78, p. 2 ("'generating' . . . means generating 'display screens'")] However, TVnGO cannot point to anything in the claim language, or anywhere else, from which a POSA could discern why two different words[10] are used to denote the same result. Instead, TVnGO insists, without any intrinsic evidentiary support, that two different words

[9] As discussed infra, this use of overlay activation criterion in the '339 Patent is irreconcilably inconsistent with the '621 Patent insofar as the '621 Patent teaches that an overlay activation signal-- not criterion-- causes the display of overlays.

[10] The verb "generate" means to create or produce or bring into existence, whereas the verb "display" means to show or reveal something already in existence. Merriam-Webster Unabridged Dictionary. This Court is mindful of the Federal Circuit's guidance that "'a general-usage dictionary cannot overcome art-specific evidence of the meaning of a claim term.'" *Phillips, 415 F.3d at 1322* (internal citation and quotation omitted). This Court's use of a general-usage dictionary in this circumstance is merely to illustrate the absence of any art-specific evidence to inform the words' meanings. See *id. at 1322-23* ("judges . . . may [] rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.") (internal citation and quotation omitted).

have the same meaning.[11] This inherent inconsistency injects even more uncertainty into the Patents-in-Suit.

Confronted with these irreconcilable inconsistencies, TVnGO mischaracterizes LG's argument. According to TVnGO, "LG's indefiniteness arguments as to overlay activation criterion and overlay activation signal are premised solely on the proposition that claim terms *must* have the same meaning across all patents." [Dkt. No. 75, p. 3 (italics in the brief)] LG's argument, however, **[*11]** is not so broad. LG asserts, and this Court agrees, the reason the claim terms are indefinite is not simply because the terms are used differently. Rather, the terms are indefinite because the different uses cannot be reconciled in a manner that informs a POSA, to a reasonable degree of certainty, of the meaning of claim terms.

Moreover, in an attempt to fill in the blanks of the Patents-in-Suit, TVnGO presents the testimony of its expert, Dr. Sprenger. In explaining to the Court what a POSA would understand, however, Dr. Sprenger actually creates more blanks. With respect to "overlay activation criteria," Dr. Sprenger explains,

> [i]n the most basic situation where there is no other information from the user regarding preferences for IP content, or specific times or channels to view content (e.g., all times and all channels are available), the TV-Internet Integration Box checks its own timetable stored in memory (see, e.g., '220 Patent at 4:28-32), determines whether the overlay activation criteria is met (e.g., confirming that the user is watching Channel 3 at 7:00 PM which would match the overlay activation criteria embedded in OEDD [the overlay enabling digital data] 2), and the TV-Internet Integration **[*12]** Box combines the overlay-enabling digital data with the TV video signal received at the first input, outputting the combined video signal to the TV set.

(Dkt. 75-2, Sprenger Suppl. Decl. P 12)

First, nothing in the Patents-in-Suit discusses at all a situation where "there is no other information from the user regarding preferences for IP content." Indeed, Dr. Sprenger's citation to the '220 Patent specification provides no support for his statements; 4:28-32 of the '220 Patent explains what happens when a user / subscriber *does* provide information concerning "what type of IP data is to be displayed and when." ['220 Patent 4:31-32].

Second, Dr. Sprenger's explanation introduces an entirely new concept that also has no support anywhere in the Patents-in-Suit: different types of "overlay enabling digital data" ("OEDD")-- e.g., "OEDD 1"; "OEDD 2" and "OEDD 3." (Dkt. 75-2, Sprenger Suppl. Decl. P 10-12, emphasis added) The fact that Dr. Sprenger, in attempting to explain what the Patents-in-Suit disclose, must create a new embodiment of the patented technology, using entirely new terms, clearly illustrates that the specifications do not inform a POSA with a reasonable certainty as to what the Patents-in-Suit claim.

B.

Lastly, **[*13]** the prosecution histories do not save the disputed claims from indefiniteness. The histories provide nothing more than what limited information is disclosed by the specifications: "overlay activation criterion" can include timing and channel information, and an overlay activation signal is received from a user. [See Dkt. 75, p. 5, 10] As discussed above, this information alone does not allow a POSA to reconcile the claims' inconsistencies.

Moreover, the Court is unpersuaded by TVnGO's argument that the patent examiners must not have found the terms indefinite because if they had, they would not have granted the Patents. First, whether an individual patent examiner, or examiners, understood what the claim terms meant is not the standard for indefiniteness. Second, the argument is tantamount to a statement of the basic statutory principle that a patent is presumed valid, *35 U.S.C. § 282*. This principle is already captured by the allocation of the burden of proof to LG (as the party seeking to invalidate the patents), id., and the standard of proof by clear and convincing evidence, which this Court has employed. *Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 95, 131 S. Ct. 2238, 180 L. Ed. 2d 131 (2011)*. The presumption alone cannot rebut the intrinsic evidence demonstrating **[*14]** that the disputed claim terms are indefinite.

Sonix Tech. Co. v. Publications Int'l, Ltd., 844 F.3d 1370 (Fed. Cir. 2017), upon which TVnGO relies, does not stand for the proposition that a patent examiner's

[11] TVnGO asserts that "LG's entire 'generate' versus 'display' argument is nothing more than its *characterization* of the claims, divorced from the actual claim language." (Dkt. 78, p. 3)(italics in the brief). However, the failing argument is TVnGO's insistence that "generate" and "display" mean the same thing.

Samsung
Ex. 1031 - Page 190

knowing allowance of claims *by itself* defeats a conclusion of indefiniteness. In Sonix, the Court reversed the District Court's indefiniteness holding because "the intrinsic evidence provided guidance as to the scope of the claims." 844 F.3d at 1377. In this case, as explained, the intrinsic evidence provides no such guidance. To the contrary, it provides confusion. Indeed, Sonix expressly states that "application [of the disputed claim terms] by the examiner and an expert do not, *on their own*, establish" definiteness. 844 F.3d at 1380 (emphasis added).

In the Court's final analysis, a review of the claim terms, the specifications, and the prosecution histories leave the Court with unresolved inconsistencies as well as unanswered questions.

IV.

Because the Court cannot construe the claims, they are indefinite. Accordingly, for the above reasons, the Court holds that '220 Patent claims 1, 9, 10, 13, 17, and 20; '945 Patent claims 1, 4, 8, 9, 12, 15, 19, 21; '969 Patent claims 1, 9, 10, 13, 17 and 20; '339 Patent claims 1, 4-7, 12-15 and 18; and '621 Patent claims 1, 4, 9, 11 are indefinite, and therefore not amenable to construction. An Order **[*15]** accompanies this Opinion.

Dated: April 16, 2020

/s/ Renée Marie Bumb

Renée Marie Bumb, U.S.D.J.

ORDER

THIS MATTER having appeared before the Court upon the parties' claim construction / indefiniteness submissions, and the Court having held a hearing on the record on January 8, 2020, for the reasons set forth in the accompanying Opinion of the same date,

IT IS on this **16th** day of **April 2020**, **ORDERED** that:

(1) '220 Patent claims 1, 9, 10, 13, 17, and 20; '945 Patent claims 1, 4, 8, 9, 12, 15, 19, 21; '969 Patent claims 1, 9, 10, 13, 17 and 20; '339 Patent claims 1, 4-7, 12-15 and 18; and '621 Patent claims 1, 4, 9, 11 are indefinite and therefore **INVALID**; and

(2) The Clerk of Court shall **CLOSE THIS FILE**.

/s/ Renée Marie Bumb

Renée Marie Bumb, U.S.D.J.

End of Document

Neutral
As of: July 26, 2022 11:29 AM Z

TVnGO Ltd. v. LG Elecs., Inc.

United States District Court for the District of New Jersey

May 23, 2019, Decided; May 23, 2019, Filed

Civil No. 18-10238 (RMB/KMW)

Reporter
2019 U.S. Dist. LEXIS 86618 *; 2019 WL 2223672

TVnGO Ltd. (BVI), Plaintiff, v. LG ELECTRONICS, INC. and LG ELECTRONICS U.S.A., INC., Defendants.

Subsequent History: Later proceeding at TVnGO Ltd. (BVI) v. LG Elecs., Inc., 2020 U.S. Dist. LEXIS 67598 (D.N.J. Apr. 16, 2020)

Core Terms

alleges, patent, prosecutions, references, inequitable conduct, asserts, deceive, reasonable inference, prior art, disclosure, disclose, affirmative defense, specific intent, foreign patent, alleged facts, reply brief, counterclaim

Counsel: **[*1]** For Plaintiff: Matthew T. Eyet, Esq., SANDELANDS EYET LLP, Bedminster, New Jersey; Charles E. Cantine, Esq., Joseph Diamante, Esq., Timothy H. Caine, Esq., KING & SPALDING LLP, New York, New York.

For Defendant: Liza M. Walsh, Esq., Selina M. Ellis, Esq., WALSH PIZZI O'REILLY FALANGA LLP, Newark, New Jersey; Natalie Bennett, Esq., Collin W. Park, Esq., Eric Kraeutler, Esq., Ghee J. Lee, Esq., MORGAN, LEWIS & BOCKIUS LLP, Washington, D.C.

Judges: Renée Marie Bumb, United States District Judge.

Opinion by: Renée Marie Bumb

Opinion

BUMB, UNITED STATES DISTRICT JUDGE:

In this patent infringement suit, Plaintiff TVnGO Ltd. (BVI) asserts that Defendants LG Electronics, Inc. and LG Electronics U.S.A., Inc. (collectively, "LG"), are infringing five of TVnGO's patents[1] which claim methods and devices that make televisions "smart"--i.e., able to display both television content and internet streaming content. LG asserts that the claims of all five patents are unenforceable based on the doctrine of inequitable conduct. LG makes this assertion in both an affirmative defense and a counterclaim.[2] Before the Court is TVnGO's Motion to Dismiss the counterclaim pursuant to Fed. R. Civ. P. 12(b)(6) / Motion to Strike the affirmative defense pursuant to Fed. R. Civ. P. 12(f). For **[*2]** the reasons stated herein, the motion will be denied.

I.

LG's inequitable conduct theory is based on alleged failures to disclose--or in some instances, with respect to the '220 and '621 patents[3], alleged failures to *properly* disclose--prior art to the USPTO during the prosecution of the applications that resulted in the Patents-in-Suit. The prior art is: (1) Japanese Patent Publication No. JP2003-018575 ("the '575 Publication") and (2) additional references disclosing the same subject matter of the European counterpart to the

---

[1] The Patents-in-Suit are U.S. Patent Nos. 8,132,220; 9,124,945; 9,392,339; ***9,407,969***; and 9,794,621, respectively, the '220 patent, the '945 patent, the '339 patent, the '969 patent and the '621 patent. "Each of the '945, '339, and '969 patents are continuations of the '220 patent. The '621 patent is a continuation of the '969 patent." (Thirteenth Affirmative Defense, "TAD", ¶ 19)

[2] The affirmative defense and counterclaim are entirely coextensive. See Counterclaim Count 11 ¶ 48 ("LGE repeats and re-alleges paragraphs 13-41 of its Thirteenth Affirmative Defense (Inequitable Conduct) to TVnGO's Complaint as fully set forth herein.").

[3] Of the Patents-in-Suit, the '220 patent was the first to issue and the '621 patent was the last to issue. (TAD ¶¶ 21, 29)

Patents-in-Suit ("the EP Publications").[4]

A. The '220 patent prosecution

The application that would result in the issuance of the '220 patent[5] was filed on July 6, 2007, and the '220 patent issued on March 6, 2012. (TAD ¶¶ 19, 24) LG asserts that at no time during this prosecution did TVnGO's prosecuting attorneys, Mr. Klima and Mr. Kavrukov (nor anyone else), disclose the EP Publications to the USPTO. (Id. ¶ 38) Further, LG explains why, in its view, this nondisclosure matters. LG asserts that the EP Publications were "materially relevant" "because these references were used as a ground for rejecting the counterpart European patent application" to the Patents-in-Suit. (Id. ¶ 38) LG elaborates, "[h]ad the USPTO **[*3]** received and considered the EP Publications and the material relevance of the EP Publications to the patentability of the Patents-in-Suit, it would have been evident that at least one independent claim of each of the Patents-in-Suit was invalid," which would have led the USPTO to reject TVnGO's patent application. (Id. ¶ 39)

Somewhat similarly, LG alleges that Mr. Klima "disclosed" the '575 Publication to the USPTO in a manner that effectively prevented the USPTO from considering it. Specifically, LG alleges that

> [o]n December 23, 2011, more than six months after the participants in the prosecution of the ['220 patent] Application became aware of the '575 Publication and after the prosecution of the [] Application had already closed, Mr. William L. Klima of the Nath Law Group filed an Information Disclosure Statement ("IDS") in the [] Application, listing several references, including the '575 Publication, and enclosing a copy of the '575 Publication in Japanese with an English abstract. However, Mr. Klima did not include in the IDS any requisite certification statement under 37 C.F.R. 1.97(e) or any explanation as to the relevance of the listed references, including the '575 Publication, despite the prior knowledge **[*4]** that the '575 Publication was applied by the Japanese Patent Office to reject the Japanese counterpart '930 JP Application.

(TAD ¶ 22)

LG alleges that five days later, the USPTO notified Mr. Klima that the IDS did not comply with the applicable regulation and therefore the information in the IDS "had not been considered." (TAD ¶ 23) LG further alleges that no one sought to correct the deficiency, and thereafter the '220 patent issued on March 6, 2012. (Id. ¶ 24)

LG alleges that the '575 Publication was materially relevant to the '220 patent application because the Japanese Patent Office applied the '575 Publication "in the rejection of the [Japanese] counterpart" to the '220 patent application. (TAD ¶ 24)

B. The '621 patent prosecution

The application that would result in the issuance of the '621 patent was filed on November 25, 2015, and the '621 patent issued on October 17, 2017. (TAD ¶¶ 27, 29)

With respect to the EP Publications, LG alleges they were disclosed in an IDS filed with the USPTO on January 26, 2017. (TAD ¶ 38) LG does not allege that there was any problem with this particular IDS filed by Mr. Kavrukov in this particular prosecution, which was last in the chronological order of the applications at issue.

Somewhat similarly, with respect to **[*5]** the '575 Publication, LG alleges the '575 Publication was also disclosed in an IDS filed by Mr. Kavrukov on January 26, 2017. (TAD ¶ 28) However, LG alleges that the IDS merely "listed the '575 Publication but did not provide information regarding the material relevance of the '575 Publication to the patentability of the '621 patent." (Id.)

Because the '621 patent is alleged to be "a continuation of the '969 Patent" which patent is, in turn, allegedly a continuation of the '220 patent (TAD ¶ 19), LG asserts that the EP Publications and the '575 Publication are materially relevant to the '621 patent application in the same way that those references are allegedly materially relevant to the '220 patent application. (See Id. ¶¶ 33, 41)

C. The prosecutions of the other Patents-in-Suit

LG alleges that neither the EP Publications nor the '575 Publication were disclosed at all during the prosecutions

[4] See TAD ¶¶ 14, 17, 35-36. TVnGO does not dispute that these two items are, indeed, prior art, as LG alleges.

[5] U.S. Application No. 11/794,825 (TAD ¶ 19).

of the applications for the '945, '339 and '969 patents. (TAD ¶¶ 25, 38) Because the these patents are each alleged to be continuations of the '220 patent (Id. ¶ 19), LG asserts that the EP Publications and the '575 Publication are materially relevant in the same way that those references are allegedly materially relevant to the '220 patent application. (See Id. ¶¶ 33, 41)

II.

Fed. R. Civ. P. 12(b)(6) provides in relevant part, **[*6]** "a party may assert the following defenses by motion: . . . (6) failure to state a claim upon which relief can be granted."

Similarly, Fed. R. Civ. P. 12(f) provides in relevant part, "[t]he Court may strike from a pleading an insufficient defense."[6]

A counterclaim or affirmative defense of inequitable conduct sounds in fraud and therefore is subject to the heightened pleading standard of Fed. R. Civ. P. 9(b). "'Whether inequitable conduct has been pleaded with particularity under Rule 9(b) is a question governed by Federal Circuit law.'" Sanders v. The Mosaic Co., 418 F. App'x 914, 918 (Fed. Cir. 2011) (quoting Exergen Corp. v. Wal-Mart Stores, Inc., 575 F.3d 1312, 1318 (Fed. Cir. 2009)). "To plead inequitable conduct, 'the pleading must identify the specific who, what, when, where, and how of the material misrepresentation or omission committed before the PTO.'" Id. (quoting Exergen).

III.

"A charge of inequitable conduct based on a failure to disclose will survive a motion to dismiss only if the plaintiff's complaint recites facts from which the court may reasonably infer that a specific individual both knew of invalidating information that was withheld from the PTO and withheld that information with a specific intent to deceive the PTO." Delano Farms Co. v. California Table Grape Comm'n, 655 F.3d 1337, 1350 (Fed. Cir. 2011) (citing Exergen, 575 F.3d at 1318, 1330 and Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276 (Fed. Cir. 2011) (en banc)).

LG states its inequitable conduct theory thusly: "the public record regarding [TVnGO's] **[*7]** dealings with the [USPTO] and foreign patent offices [reveals] a pattern of selectively withholding prior art or 'disclosing' the prior art in a non-compliant way that [TVnGO] knew would shield the reference from consideration." (Opposition Brief, Dkt 25, p. 1) According to LG, it is this pattern--demonstrated over the span of all five patent prosecutions at issue--that supports a reasonable inference that Mr. Klima and Mr. Kavrukov had the requisite intent to deceive the USPTO. (Id. p. 16-17)

TVnGO asserts that LG's inequitable conduct claim is insufficiently particularized and therefore fails as a matter of law. Each of TVnGO's arguments is addressed in turn.

A. Materiality

First, TVnGO argues that "LG makes conclusory allegations that references are material merely because they were identified in foreign patent prosecutions." (Moving Brief, Dkt 23-1, p. 10; Reply Brief, Dkt 26, p. 2, 6) This argument misstates the allegations of LG's Answer and Counterclaim. LG does not allege that references were merely *identified* in foreign patent prosecutions. Rather, LG specifically alleges that both the EP Publications and the '575 Publication were the basis for *rejecting* claims in the foreign patent applications. **[*8]** (TAD ¶¶ 20, 24, 25, 35-36, 38) As LG explains, the alleged facts that "the '575 [Publication] and the [EP Publications] [] persuaded foreign patent offices to question the novelty of the claimed subject matter" support a reasonable conclusion that those references were material. (Opposition Brief, Dkt 25, p. 19, 21) That is, the factual allegations support a conclusion "that the PTO examiner in the United States would have considered the [prior art] as material references" because the examiners in Europe and Japan did. (Id.)

As LG persuasively observes, "the [Manual of Patent Examining Procedure] bolsters the inference of materiality." (Opposition Brief, Dkt 25, p. 21) The MPEP states, "[t]he inference that such prior art or other information is material is especially strong where it has been used in rejecting the same or similar claims in the foreign application." MPEP § 2001.06(a).[7] TVnGO does

[6] Rule 12 expressly states that "[a] motion under this rule may be joined with any other motion allowed by this rule." Fed. R. Civ. P. 12(g)(1). Joining a 12(b)(6) motion with a 12(f) motion is particularly appropriate in this case where the counterclaim challenged by the 12(b)(6) motion is identical to the affirmative defense challenged by the 12(f) motion.

[7] See also, LNP Eng'g Plastics, Inc. v. Miller Waste Mills, Inc.,

not directly address this argument in its reply brief. Rather, it asserts that LG has not sufficiently pleaded materiality because it has not provided a "substantive analysis" of how the '575 Publication and the EP Publications affect each claim of the Patents-in-Suit. (Reply Brief, Dkt 26, p. 7) TVnGO, however, **[*9]** provides no legal support for its argument which, if accepted, would impose a higher burden of pleading than Dealno Farms and Exergen require.[8] At the pleadings stage, TVnGO need only plead "facts from which the court may reasonably infer" that the omitted information was material. *Dealno Farms, 555 F.3d at 1350* (citing Exergen). As the MPEP explains, the facts LG alleges strongly support the reasonable inference that the '575 Publication and the EP Publications were material to the prosecutions of the Patents-in-Suit. Accordingly, the Court holds that LG has sufficiently pleaded facts supporting a reasonable inference of materiality as to the '575 Publication and the EP Publications.

B. Specific Individuals

Next, TVnGO argues that LG does not identify "which specific individuals it contends had specific intent to commit fraud on the PTO." (Reply Brief, Dkt 26, p. 5) While some paragraphs of LG's Thirteenth Affirmative Defense are exceedingly vague[9], other allegations are sufficiently particularized. The pleading specifically identifies Mr. Klima and Mr. Kavrukov and describes what they allegedly did, and failed to do, during the prosecutions of the Patents-in-Suit. For example, LG alleges **[*10]** that Mr. Klima untimely filed the non-compliant IDS in the '220 patent prosecution, and then failed to act on the USPTO's Notification of Non-Compliant IDS. (TAD ¶¶ 22-24) Similarly, LG alleges that Mr. Kavrukov filed an incomplete IDS in the '621 patent prosecution. (Id. ¶ 28)

Accordingly, the Court holds that LG's pleading with respect to Mr. Klima and Mr. Kavrukov[10] is sufficiently particularized.

C. Intent

Lastly, TVnGo argues that "[a]ny inference that someone at TVnGO intentionally tried to deceive the PTO based on these [alleged] facts would be unreasonable[11] because the references were in fact disclosed." (Moving Brief, Dkt 23-1, p. 18; see also Reply Brief, Dkt 26, p. 3) Tellingly, however, TVnGO does not address the details of allegedly when or how the references were disclosed. Yet, it is precisely these details that support LG's theory of its case. For example, while LG does, indeed, allege that the EP Publications were fully disclosed to the PTO in a compliant IDS (TAD ¶ 38), the more salient alleged fact is the timing of that disclosure. LG alleges that the EP Publications and their materiality were known to Mr. Klima and Mr. Kavrukov as early as 2011 (Id. ¶ 35), and should **[*11]** have been fully disclosed as prior art in the prosecutions of all five of the Patents-in-Suit, but LG alleges that the EP Publications were not disclosed until 2017, during the prosecution of the last patent at issue, the '621 patent (Id. ¶ 38). Thus, even if the disclosure of the EP Publications in the '621 patent prosecution would

---

*2000 U.S. Dist. LEXIS 20488, 2000 WL 33341185, at *10 (D. Del. Aug. 8, 2000)* ("Materiality of an uncited prior art reference can be shown by evidence that the applicant cited the prior art in related foreign prosecutions. If the uncited prior art provided a basis for a foreign patent office's rejection of counterpart application, then the inference of materiality is especially strong.") (citing MPEP § 2001.06(a)) aff'd *275 F.3d 1347 (Fed. Cir. 2001)* (quoting MPEP § 2001.06(a)); see generally, *Molins PLC v. Textron, Inc., 48 F.3d 1172, 1180 (Fed. Cir. 1995)* ("While the MPEP does not have the force of law, it is entitled to judicial notice as an official interpretation of statutes or regulations as long as it is not in conflict therewith.").

[8] The Court also questions how a meaningful claim analysis could possibly be done before the Court has construed the claims of the Patents-in-Suit.

[9] See, e.g., TAD ¶ 15 ("one or more of the participants in the prosecution of the applications that led to the Patents-in-Suit failed to satisfy their duty of disclosure with respect to the Patents-in-Suit."); see also infra, n. 10.

[10] In its Opposition Brief, LG argues that "[a]t the very least, LGE alleges that Messrs. Klima and Kavrukov and/or Ms. Hopkins (prosecuting attorneys) and Mr. Yaakov Merlin (named inventor of the Patents-in-Suit) have committed fraud on the Patent Office." (Opposition Brief, Dkt 25, p. 9) The Thirteenth Affirmative Defense, as currently pleaded, does not allege with any specificity what Ms. Hopkins or the named inventor did or did not do during the prosecutions of the Patents-in-Suit. In the event that discovery reveals additional relevant information as to these individuals' participation in the asserted inequitable conduct, LG may file, if appropriate, a Motion to Amend.

[11] "[A]n inference of deceptive intent must be reasonable and drawn from a pleading's allegations of underlying fact to satisfy the Federal Rules of Civil Procedure's heightened pleading requirement." *Exergen, 575 F.3d at 1329 n.5.*

preclude a claim of inequitable conduct during the prosecution of the '621 patent[12], it does not preclude claims of inequitable conduct with regard to the other four Patents-in-Suit.

TVnGO invites the Court to conclude, based solely on the alleged fact that the EP Publications were properly disclosed one out of five times, that no inference of intent to defraud may logically be drawn as to any of the Patents-in-Suit. According to TVnGO, if it had a specific intent to deceive, it would have withheld the reference altogether, rather than disclose it, which would only give "future challengers" a "roadmap" of an invalidity argument. (Moving Brief, Dkt 23-1, p. 19) While this is one possible inference to be drawn from the alleged facts, it is not the only inference. An equally plausible inference is that an intentionally delayed disclosure during the last patent prosecution is not inconsistent **[*12]** with a specific intent to deceive in earlier prosecutions.[13] Thus, the Court disagrees that the allegations concerning disclosure of the EP Publications during the '621 patent prosecution preclude all inferences of specific intent to deceive in other earlier related prosecutions.

Moreover, LG alleges that the '575 Publication was never *properly* disclosed in any prosecution--another detail TVnGO's "disclosure" argument ignores. TVnGO, through Mr. Klima and Mr. Kavrukov, should have disclosed the '575 Publication on five separate occasions (i.e., during the prosecution of each Patent-in-Suit) yet allegedly completely failed to disclose during the second, third, and fourth opportunities to do so. (TAD ¶¶ 25-38) During the first and fifth opportunities, LG alleges that the '575 Publication was improperly disclosed (Id. ¶¶ 22, 28) such that at no time during the prosecutions of any of the Patents-in-Suit did the USPTO have before it all of the information materially relevant to the patent prosecutions.

Accordingly, the Court holds that LG has pleaded sufficient facts to support a reasonable inference of specific intent to deceive during the prosecutions of all five Patents-in-Suit.

IV.

For the above-stated **[*13]** reasons, TVnGO's motion will be denied. An Order accompanies this Opinion.

Dated: May 23, 2019

/s/ Renée Marie Bumb

Renée Marie Bumb, U.S.D.J.

ORDER

This matter came before the Court upon TVnGO's Motion to Dismiss the eleventh counterclaim pursuant to Fed. R. Civ. P. 12(b)(6) / Motion to Strike the thirteenth affirmative defense pursuant to Fed. R. Civ. P. 12(f). [Dkt No. 23].

For the reasons set forth in the accompanying Opinion of the same date,

IT IS on this 23rd day of May 2019, hereby **ORDERED** that the motion is **DENIED**.

/s/ Renée Marie Bumb

Renée Marie Bumb, U.S.D.J.

End of Document

[12] The Court does not rule on this issue at this time, because, as explained next, LG has alleged sufficient facts to support a claim of inequitable conduct during the prosecution of the '621 patent based on the alleged inadequate disclosure of the '575 Publication in the '621 patent prosecution.

[13] For example, LG suggests that failing to disclose the EP Publications during the '220 patent prosecution could have benefitted TVnGO independent of that reference's impact on the '621 patent. (See Opposition Brief, Dkt 25, p. 22)

Neutral
As of: July 26, 2022 11:29 AM Z

TVnGO Ltd. (BVI) v. LG Elecs. Inc.

United States Court of Appeals for the Federal Circuit

June 28, 2021, Decided

2020-1837

Reporter
861 Fed. Appx. 453 *; 2021 U.S. App. LEXIS 19106 **; 2021 U.S.P.Q.2D (BNA) 697; 2021 WL 2644227

TVNGO LTD. (BVI), Plaintiff-Appellant v. LG ELECTRONICS INC., LG ELECTRONICS USA, INC., Defendants-Appellees

Notice: THIS DECISION WAS ISSUED AS UNPUBLISHED OR NONPRECEDENTIAL AND MAY NOT BE CITED AS PRECEDENT. PLEASE REFER TO *FEDERAL RULES OF APPELLATE PROCEDURE RULE 32.1* GOVERNING THE CITATION TO UNPUBLISHED OPINIONS.

Prior History: **[**1]** Appeal from the United States District Court for the District of New Jersey in No. 1:18-cv-10238-RMB-KMW, Judge Renee Marie Bumb.

TVnGO Ltd. (BVI) v. LG Elecs. Inc., 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781 (D.N.J. Apr. 16, 2020)

Disposition: AFFIRMED.

Core Terms

overlay, activation, display, indefinite, criterion, specification, user, patent, inconsistencies, phrases, district court, signal, Internet, skill, icon, premises, reasonable certainty, remote control, disputed, screen, words, intrinsic evidence, pressing, invalid

Case Summary

Overview
HOLDINGS: [1]-With respect to patents generally directed to methods and devices that make televisions "smart," the district court did not err in finding that the patent claims plaintiff asserted against defendant were invalid as indefinite under 35 U.S.C.S. § 112, para. 2 because the precise meanings of two phrases at issue were not reasonably certain in view of the intra-patent inconsistencies, including an inconsistency between the specification and the claims and between the independent and dependent claims.

Outcome
Decision affirmed.

LexisNexis® Headnotes

Patent Law > ... > Claims > Claim Language > Combination Claims

Patent Law > ... > Specifications > Definiteness > Precision Standards

Patent Law > ... > Specifications > Description Requirement > Standards & Tests

Patent Law > Infringement Actions > Claim Interpretation > Means Plus Function Clauses

Patent Law > ... > Specifications > Enablement Requirement > Standards & Tests

HN1[] **Claim Language, Combination Claims**

A patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them. Accordingly, the Patent Act requires that a patent specification conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as the invention. *35 U.S.C.S. § 112, para. 2*. Patent claims are indefinite if they fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.

Renee Preston

Patent Law > Infringement Actions > Claim Interpretation > Aids & Extrinsic Evidence

Patent Law > Infringement Actions > Claim Interpretation > Scope of Claim

Patent Law > Infringement Actions > Claim Interpretation > Construction Preferences

Patent Law > Infringement Actions > Prosecution History Estoppel > Prosecution Related Arguments & Remarks

HN2[] Claim Interpretation, Aids & Extrinsic Evidence

In the face of an allegation of indefiniteness, general principles of claim construction apply. The words of a claim are generally given their ordinary and customary meaning, which is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention. Claims are to be read in light of the patent's specification and prosecution history.

Evidence > Burdens of Proof > Clear & Convincing Proof

Patent Law > Infringement Actions > Burdens of Proof

Patent Law > ... > Specifications > Definiteness > Fact & Law Issues

Patent Law > Jurisdiction & Review > Standards of Review > De Novo Review

HN3[] Burdens of Proof, Clear & Convincing Proof

Whether a patent claim is indefinite under 35 U.S.C.S. § 112 is ultimately a legal conclusion that is reviewed de novo. Any fact critical to a holding on indefiniteness must be proven by the challenger by clear and convincing evidence. If indefiniteness can be determined based solely on intrinsic evidence, review is de novo.

Counsel: CHARLES CANTINE, Dunlap Bennett & Ludwig PLLC, New York, NY, argued for plaintiff-appellant.

WILLIAM R. PETERSON, Morgan, Lewis & Bockius LLP, Houston, TX, argued for defendants-appellees. Also represented by NATALIE A. BENNETT, Washington, DC; ERIC KRAEUTLER, Philadelphia, PA; JEREMY DEANE PETERSON, PV Law LLP, Washington, DC.

Judges: Before PROST*, SCHALL, and REYNA, Circuit Judges.

Opinion by: Sharon Prost

Opinion

[*454] PROST, Circuit Judge.

TVnGO Ltd. (BVI) ("TVnGO") appeals a final patent-invalidity judgment by the U.S. District Court for the District of New Jersey. We agree that the patent claims TVnGO asserts against LG Electronics Inc. and LG Electronics U.S.A., Inc. (collectively, "LGE") are indefinite under 35 U.S.C. § 112, paragraph 2.[1] We therefore affirm.

BACKGROUND

I

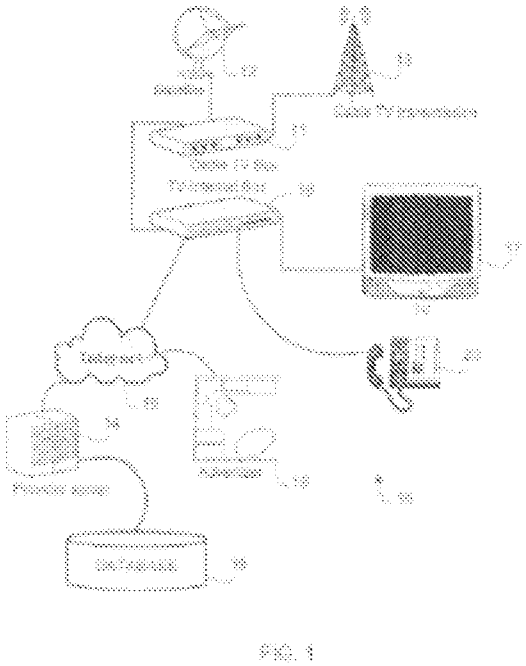
TVnGO owns U.S. Patent Nos. 8,132,220 ("the '220 patent"), 9,124,945 ("the '945 patent"), Patents, 9,392,339 ("the '339 patent"), Patents, ***9,407,969*** ("the '969 patent"), Patents, and 9,794,621 ("the '621 patent"), Patents, which share a specification and drawings.[2] The patents relate to providing "a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site."'220 patent col. 2 ll. 20-22. Figure 1, for example, depicts a "TV-Internet Integration Box" with inputs from a cable box **[**2]** and the internet, and an output to a television:

[*455]

* Circuit Judge Sharon Prost vacated the position of Chief Judge on May 21, 2021.

[1] The America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284, effective September 16, 2012, designated § 112, paragraph 2 as § 112(b). These patents stem from an application filed in 2005, so we refer to pre-AIA § 112.

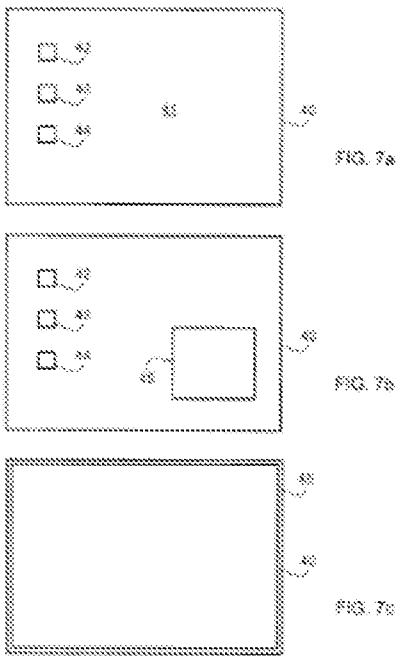
[2] For simplicity, all citations to the shared specification are to the '220 patent.



Id. at Fig. 1.

This system can be influenced in various ways. An advertiser may specify conditions for displaying advertisements, *id.* at col. 3 ll. 59-66, an IP-content provider may store "calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises," *id.* at col. 4 ll. 9-13, and a subscriber may select "what kind of IP content" he or she "wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed," *id.* at col. 4 ll. 21-24. The specification further describes a remote control, *id.* at col. 7 ll. 7-50, that can be programmed according to the embodiment of Figures 7a—c:

[*456]



Id. at Fig. 7a—c.

Figure 7a "shows the default situation where a TV screen 40 displays a conventional TV broadcast in a window 41 that is sized to occupy the whole area of the TV screen 40," as well as "IP icons 42, 43 and 44 each of which points to a different IP content that is streamed from a respective web site of known address." *Id.* at col. 7 ll. 29-35. In TVnGO's view, an icon "could take the form of a commonly recognized logo, such as the **[**3]** Netflix logo." *TVnGO Ltd. (BVI) v. LG Elecs. Inc., 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *1 n.3 (D.N.J. Apr. 17, 2020)*. Figure 7b shows that, upon "pressing the key on the remote control unit 30 that corresponds to the icon 42, the IP content corresponding thereto is displayed within a small window 45.'"220 patent col. 7 ll. 35-37. At this point, "[t]he icons 42, 43 and 44 remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit 30." *Id.* at col. 7 ll. 39-42. "On pressing a key a second time in succession, the IP content is re-sized so that its window 45 occupies substantially the whole area of the screen," as shown in Figure 7c. *Id.* at col. 7 ll. 42-44. "On pressing the key a third time in succession, the situation reverts to the default." *Id.* at col. 7 ll. 44-46. "Thus, each key operates as a three-way toggle that switches between three different display modes." *Id.* at col. 7 ll. 48-50.

II

TVnGO alleges that LGE's "Smart TVs" infringe the asserted patents, which it describes as generally

directed to "methods and devices that make televisions 'smart.'" J.A. 103-04 (Complaint). After a *Markman* hearing, pre-and post-hearing briefing, and supplemental briefing, the district court issued a claim-construction opinion concluding that **[**4]** the two claim phrases at issue here render the asserted claims indefinite under § 112, paragraph 2. TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *7. In the district court's view, these phrases present "irreconcilable inconsistencies" within and across the asserted patents ("intra-" and "inter-patent" inconsistencies, respectively). 2020 U.S. Dist. LEXIS 67598, [WL] at *3. "Try as it might," the district court could not "construe the claims with any confidence." 2020 U.S. Dist. LEXIS 67598, [WL] at *4. Accordingly, the court **[*457]** held the asserted claims invalid. J.A. 18.[3] TVnGO appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

Discussion

HN1[] "[A] patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them." Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 909, 134 S. Ct. 2120, 189 L. Ed. 2d 37 (2014) (cleaned up). Accordingly, "[t]he Patent Act requires that a patent specification 'conclude with one or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as [the] invention.'" Id. at 901 (second alteration in original) (quoting 35 U.S.C. § 112, para. 2). Patent claims are indefinite if they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.*

HN2[] "In the face of an allegation of indefiniteness, general principles of claim construction apply." Biosig Instruments, Inc. v. Nautilus, Inc., 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting Enzo Biochem, Inc. v. Applera Corp., 599 F.3d 1325, 1332 (Fed. Cir. 2010)). The words of a claim "are generally **[**5]** given their ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc). "[C]laims are to be read in light of the patent's specification and prosecution history." Nautilus, 572 U.S. at 908.

HN3[] Whether a claim is indefinite under 35 U.S.C. § 112 is ultimately a legal conclusion that we review de novo. Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP, 838 F.3d 1224, 1228 (Fed. Cir. 2016). "Any fact critical to a holding on indefiniteness . . . must be proven by the challenger by clear and convincing evidence." *Id.* (alteration in original) (quoting Intel Corp. v. VIA Techs., Inc., 319 F.3d 1357, 1366 (Fed. Cir. 2003)). "If indefiniteness can be determined based solely on intrinsic evidence, our review is de novo." *Id.* Here, the district court relied on "a review of the claim terms, the specifications, and the prosecution histories" and declined to rely on TVnGO's expert testimony because it had "no support" in the patents. TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *6-7. Therefore, our review is de novo.

Two phrases are at issue here: "overlay activation criterion" and "overlay activation signal."[4] In the claims, these phrases relate generally to producing overlays (e.g., in Figures 7a—c above). TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *1. But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district **[**6]** court. Before addressing those inconsistencies, however, we first highlight the lack of intrinsic evidence in this case as to the meanings of these phrases.

For starters, the parties agree that neither "overlay activation criterion" nor "overlay activation signal" has an ordinary meaning in the art. Appellees' Br. 15; Reply Br. 13; *see* TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *3 & n.8. Instead, TVnGO contends that a skilled artisan would understand the disputed **[*458]** phrases by stitching together their constituent words.[5] Reply Br. 2 ("[T]he terms - "overlay," "activation," "criterion," and "signal" - are each easily understood, plain English words."); Oral Arg. at 2:24-46 (arguing that "overlay has a meaning, criterion has a meaning, signal

---

[3] The claims are: '220 patent claims 1, 9-10, 13, 17, and 20; '945 patent claims 1, 4, 8, 9, 12, 15, 19, and 21; '969 patent claims 1, 9-10, 13, 17, and 20; '339 patent claims 1, 4-7, 12-15, and 18; and '621 patent claims 1, 4, 9, and 11.

[4] The district court's analysis as to "overlay activation signal" applied equally to the phrase "special overlay activation signal" appearing in the '945 and '621 patents. TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *2 n.4.

[5] At the district court, TVnGO contended that no construction was necessary and in the alternative proposed constructions which, LGE notes, expanded in response to the inconsistencies LGE raised. *See* Appellees' Br. 23-28.

has a meaning, activation has a meaning").[6] Here, we are unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean.

The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification, as both were added to the claims during prosecution. And the "limited information" provided by the prosecution history isn't enough to provide reasonable certainty here either. *TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *6*. Like **[**7]** the district court, we are unconvinced that the disputed phrases "are far from indefinite" merely because they were "added to the claims, discussed, understood and considered by the Examiner, and ultimately allowed." Appellant's Br. 10; *see Sonix Tech. Co. v. Publ'ns Int'l, Ltd., 844 F.3d 1370, 1380 (Fed. Cir. 2017)*. This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below as to the '339, '945, and '621 patents (discussed in Section I), and the '220 and '969 patents (discussed in Section II).

I

We turn now to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '339, '945, and '621 patents: an inconsistency between the specification and the claims as to the result achieved by an "overlay activation criterion" or "overlay activation signal." Specifically, beyond its failure to mention the disputed phrases, the specification's use of the words "activates" and "activating" injects further uncertainty. While the specification uses these words to describe activating an already overlaid icon to display the IP content it represents, the claims appear to use the disputed phrases with respect to displaying an overlay in the first place—creating confusion as to which reading is correct. On the one hand, the specification states that **[**8]** "pressing on a specific key *activates* the displayed icon,'"220 patent col. 7 ll. 19-22 (emphasis added), and references "the appropriate keys or button for *activating* each icon," *id.* at col. 7 ll. 24-25 (emphasis added). The claims, however, point in a different direction. With respect to the "criterion" term, '339 patent claims 1 and 15 recite "respond[ing] to an overlay activation criterion to cause the display screen to display the overlays." With respect to the "signal" term, '945 patent claims 1 and 12 state that the result of processing the "overlay activation signal" is "generating display drive signals causing the TV screen to display the overlays," and '621 patent claim 1 recites "generating display drive signals that cause the TV screen to display the one or more overlays."

TVnGO responds that the disputed terms cover both displaying an initial overlay and displaying IP material. *E.g.*, Reply Br. 26. But we are not persuaded that this suggestion clears up the uncertainty, as it could also be the case that one or the other of these options is right. Even if it may be possible to "ascribe some meaning" to the disputed limitation, as TVnGO's **[*459]** reading attempts, more is required: one of ordinary skill must have reasonable **[**9]** certainty. *Nautilus, 572 U.S. at 911*. Here, a person of ordinary skill would encounter two claim phrases without an ordinary meaning in the art. *See Teva Pharms. USA, Inc. v. Sandoz, Inc., 789 F.3d 1335, 1345 (Fed. Cir. 2015)* (indefinite term had no "plain meaning to one of skill in the art"). Upon consulting the specification, he or she would not find those phrases. *See id. at 1344* (indefinite term not defined in specification); *Infinity Comput. Prods., Inc. v. Oki Data Ams., Inc., 987 F.3d 1053, 1058 (Fed. Cir. 2021)* (indefinite term absent from specification). And when attempting to glean their meaning from the patent's use of "activates" and "activating," he or she would find that "the patents teach two different results"—i.e., display of IP content associated with an already displayed overlay versus display of an overlay in the first place—without reasonable certainty as to which reading is correct. *TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *3*. The asserted '339, '945, and '621 patent claims are therefore indefinite.

II

We turn next to the intra-patent inconsistency the district court relied on in holding indefinite the claims of the '220 and '969 patents. This is an inconsistency between the independent and dependent claims regarding whether an "overlay activation criterion" comes from the internet or from a user's premises. On the one hand, the independent claims indicate that an "overlay activation criterion" is a type of "overlay-enabling digital data" **[**10]** that is provided "over the Internet" and "transmitted to the user's premises."'220 patent claims 1, 13; '969 patent claims 1, 13. But the dependent claims, on the other hand, state that "said overlay activation criterion includes . . . a user command information," indicating that an "overlay activation criterion" can come from a user's premises via the remote control. '220 patent claims 9, 20; '969 patent claims 9, 20. As the district court explained, "the intrinsic

[6] No. 20-1837, http://www.cafc.uscourts.gov/oral-argument-recordings.

evidence presents . . . irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet—i.e., from the user's premises." *TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *3*.

For its part, TVnGO asserts that an overlay activation criterion "comes from the Internet," Reply Br. 3, arguing that, although "'user commands' . . . come from a user, not the Internet," "user command *information*" comes from the internet. Appellant's Br. 20; *see also* Reply Br. 19 ("There is no dispute that a 'user command' comes from a user."). This distinction lacks intrinsic support. Rather, the specification uses the word "command" only once, and in relation to the infrared (IR) remote control. '220 patent col. 7 ll. 2-3 ("An IR receiver 28 is adapted **[**11]** to receive IR commands from a remote control unit."). And when other dependent claims use "command," they similarly recite "receiving a command from a user at said user premises." *Id.* at claims 3, 15; '969 patent claims 3, 15. Accordingly, one of ordinary skill would lack reasonable certainty as to the source of an "overlay activation criterion"—whether the internet or a user's premises.

TVnGO argues in the alternative that this alleged inconsistency is better characterized as an allegation that the dependent claims are invalid for sweeping more broadly than the independent claims. *See 35 U.S.C. § 112, para. 4*. TVnGO misses the mark. The issue is not breadth of the dependent claims but their use of the disputed phrase in a way that contradicts the independent claims. The dependent claims **[*460]** state that "s*aid overlay activation criterion* includes . . . a user command information," which conflicts with the independent claim's use of this same phrase. '220 patent claims 9, 20 (emphasis added); '969 patent claims 9, 20 (same). That prevents reasonable certainty.

Further, merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" **[**12]** in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in "[o]ther claims of the patent in question," which "can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips, 415 F.3d at 1314*. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that. The asserted '220 and '969 patent claims are therefore indefinite.

Conclusion

The district court also relied on inter-patent inconsistencies. *TVnGO, 2020 U.S. Dist. LEXIS 67598, 2020 WL 1899781, at *4-6*. We find it unnecessary to reach those, as the intra-patent grounds discussed above are sufficient to establish indefiniteness. We have considered TVnGO's remaining arguments and find them unpersuasive. The district court correctly concluded that the asserted claims are invalid for indefiniteness. We affirm.

AFFIRMED

End of Document

US9407969B2 - Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material

Original

Bibliographic information & Images

Publication number and date
US9407969B2
2016-08-02
Granted

Application number and date
US13336189 {/api/control?query=AN:{"US13336189"}&autosearch=true}
2011-12-23

Priority number and date
US13336189 {/api/control?query=PRN:{"US13336189"}&autosearch=true}
2011-12-23

Ultimate owner
TVNGO {/api/control?query=uo:{"TVNGO"}&autosearch=true}

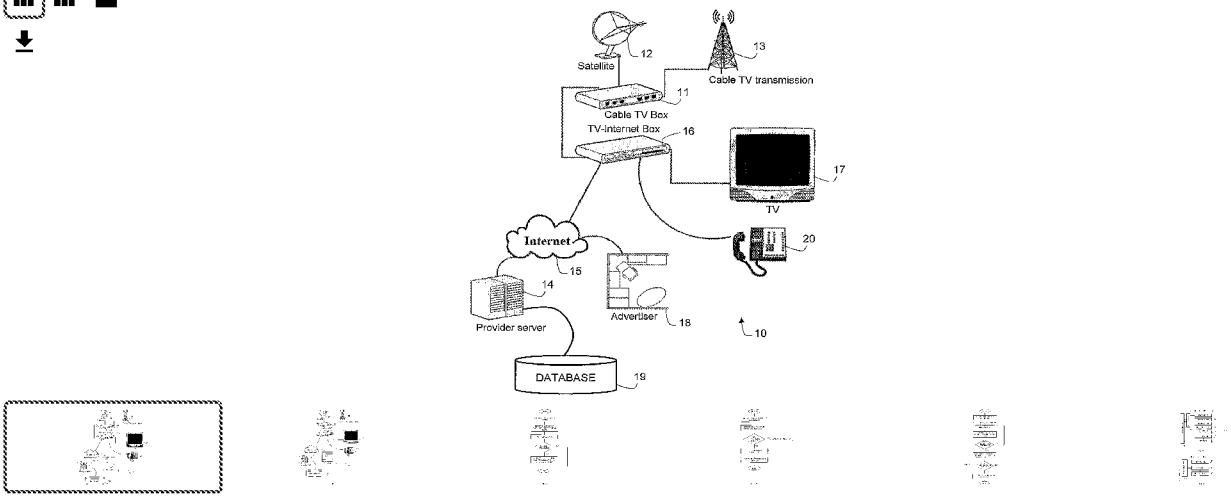
Original assignee
Yaakov Merlin {/api/control?query=pa:{"Yaakov%20Merlin"}&autosearch=true}

Current assignee
TVNGO LTD. (BVI) {/api/control?query=pacu:{"TVNGO%20LTD.%20(BVI)"}&autosearch=true}

Inventor
Yaakov Merlin {/api/control?query=in:{"Yaakov%20Merlin"}&autosearch=true}

Legal representative
Ivan S. Kavrukov {/api/control?query=ag:{"Ivan%20S.%20Kavrukov"}&autosearch=true}

1/8 Clipped image



Abstract

A method of displaying an Internet signal on a TV. Preferably, at least a portion of the Internet signal is selectively displayed by a remote activation control signal.

Original

Claims

1. A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising: (a) providing a combiner circuit at the user's premises, wherein: the combiner circuit is coupled to a TV set and connected to a separate TV timer box or TV tuner in the TV set, at the user's premises, and the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet, wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and wherein said overlay-enabling digital data includes at least: a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored, an image indicative of the content associated with said overlay-enabling digital data, and an overlay activation criterion; and (b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said activation criterion is met, wherein generating an overlay includes: generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

2. The method according to claim 1 , wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user profile.

3. The method according to claim 1 , further including: receiving a command from a user at said user premises; and responsive to said command, resizing said first portion and/or said second portion of said first display screen.

4. The method according to claim 1 , wherein the content stored at said website enables streaming of digital data over the Internet; and said method further including: pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

5. The method according to claim 1 , wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein said generating an overlay further includes within said first display said one or more second images.

6. The method according to claim 1 , wherein the overlay-enabling digital data is supplementary or complementary to the video signals.

7. The method according to claim 1 , wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

8. The method according to claim 1 , wherein the image contains textual information advising the user to press a particular button on a remote control unit.

9. The method according to claim 1 , wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.

10. The method according to claim 5 , further including: periodically accessing a web server for downloading said overlay-enabling digital data; extracting from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images; retrieving and storing digital content from said web sites; and if the overlay activation criterion is met and a user command that is associated with an image from amongst said one or more second images is identified, displaying the respective image from amongst the second images, accessing the respective web site associated with the displayed image and extracting and buffering content from the website.

11. The method according to claim 5 , further comprising displaying a respective IP content when a corresponding one of said one or more second images is selected.

12. The method according to claim 7 , including selecting specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

13. A TV-Internet Integration circuit for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the TV-Internet Integration Box comprising: a combiner circuit at a user's premises coupled to a separate TV tuner box or TV tuner, wherein the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner, and an Internet data input providing overlay-enabling digital data over the Internet, wherein said video signals and said overlay-enabling digital data are received at the combiner circuit at the user's premises by different resources as mutually distinct and independent inputs, and wherein said overlay-enabling digital data includes at least: a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored; an image indicative of the content associated with said overlay-enabling digital data; and an overlay activation criterion, wherein the combiner circuit is responsive to an overlay activation criterion being met for generating a corresponding overlay, including: generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, and generate a second video display screen including at least a portion which corresponds to said content; and a video output interface, coupled to or integrated within the combiner circuit and configured to be coupled to a video input of said TV set and to display said first display screen or said second video display screen.

14. The TV-Internet Integration circuit according to claim 13 , wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user-profile.

15. The TV-Internet Integration circuit according to claim 13 , further including: a command input for receiving a command from a user at said user premises; and a frame adjuster for resizing said first portion and/or said second portion of said first display screen in response to said command.

16. The TV-Internet Integration circuit according to claim 13 , further including: a receiver for receiving a digital data stream, wherein the stream of the digital data is enabled by the content stored at said website; and a processing unit for pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

17. The TV-internet Integration circuit according to claim 13 , wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein the combiner circuit is configured to: periodically access a web server for downloading said overlay-enabling digital data; extract from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images; retrieve and store digital content from said web sites; and if the overlay activation criterion is met, and a user command that is associated with an image from amongst said one or more second images is identified, display the respective image from amongst the second images, access the respective web site associated with the displayed image and extract and buffer content from the website.

18. The TV-Internet Integration circuit according to claim 13 , wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

19. The TV-Internet Integration circuit according to claim 13 , wherein the image contains textual information advising the user to press a particular button on a remote control unit.

20. The TV-Internet Integration circuit according to claim 13 , wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.

21. The TV-Internet Integration circuit according to claim 18 , wherein the icon is colored so as to allow user selection of a specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

Original

Families

Display in a list (/api/control?familiesSearch=_) INPADOC

This section contains all family relations of this particular document. For more information about the different families, refer to the User Manual (Glossary/Families).

Extended (26) Priority date/claims	Complete (5) Priority date/claims	Main (5) Priority date/claims	Domestic (2) Priority date/claims	Publication number	Application number	Title	Status
2005-01-11 EP1847127 JP2007550930 RU2007129646 US11794825 US13336189 US13336219 US13336239 WOIL05000035	2011-12-23 US11794825 US13336219	2011-12-23 US11794825 US13336219	2011-12-23	US9124945B2	US13336219	Integrating, at user's premises, TV channel format material with IP format material through overlays	Granted
				US20120096506A1	US13336219	METHOD FOR DISPLAYING TV BROADCAST SIGNAL AND INTERNET SIGNAL ON TV	Granted
	2011-12-23	2011-12-23	2011-12-23	US9392339B2	US13336239	TV-Internet integration circuit	Granted

US11794825 US13336239	US11794825 US13336239		☐	US20120096507A1	US13336239	TV SYSTEM FOR DISPLAYING TV BROADCASTS SIGNAL AND INTERNET SIGNAL	Granted
2011-12-23 US11794825 US13336189	2011-12-23 US11794825 US13336189	2011-12-23	☐	US20170302993A9	US14951990	METHOD OF DISPLAYING INTERNET SIGNAL ON TV	Granted
			☐	US9794621B2	US14951990	Method of displaying internet signal on TV	Granted
			☐	US20160261910A1	US14951990	METHOD OF DISPLAYING INTERNET SIGNAL ON TV	Granted
		2011-12-23	☐	US9407969B2	US13336189	Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material	Granted
			☐	US20120096505A1	US13336189	METHOD OF DISPLAYING INTERNET SIGNAL ON TV	Granted
2005-01-11 EP1847127 JP2007550930 RU2007129646 WOIL05000035	2005-01-11 EP1847127 RU2007129646 WOIL05000035	2005-01-11	☐	TWI283131B	TW094113241	Method and apparatus for facilitating toggling between internet and TV broadcasts	Ceased
			☐	TW200625960A	TW094113241	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Ceased
		2005-01-11	☐	CN100508593C	CN200510096623	Method and apparatus for facilitating toggling between internet and TV broadcasts	Granted
			☐	CN1805538A	CN200510096623	Method and apparatus for facilitating toggling between internet and TV broadcasts	Granted
		2005-01-11	☐	RU2007129646A	RU2007129646	METHOD AND DEVICE FOR THE SIMPLIFIED SWITCHING BETWEEN THE INTERNET- TELEVISION AND THE USUAL TELEVISION	Ceased
		2005-01-11	☐	HK1089315A1	HK06109604	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Granted
		2005-01-11	☐	JP2008527897A	JP2007550930	Method and device for urging the Internet and television distribution between switching of the distribution	Filed
		2005-01-11	☐	WO2006075313A1	WOIL05000035	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Filed
		2005-01-11	☐	EP1847127B1	EP05703078	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Granted
			☐	EP1847127A1	EP05703078	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Granted
		2005-01-11	☐	US8132220B2	US11794825	Method and apparatus for facilitating toggling between internet and TV broadcasts	Granted
			☐	US20080046942A1	US11794825	Method and Apparatus for Facilitating Toggling Between Internet and Tv Broadcasts	Granted
		2005-01-11	☐	CA2592508C	CA2592508	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Granted
			☐	CA2592508A1	CA2592508	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Granted
		2005-01-11	☐	IL184333A	IL184333	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Granted

				☐	IL184333D0	IL184333	METHOD AND APPARATUS FOR FACILITATING TOGGLING BETWEEN INTERNET AND TV BROADCASTS	Granted
		2005-01-11 JP2007550930	2005-01-11	☐	JP2008527897A5	JP2007550930	Method and device for urging the Internet and television distribution between switching of the distribution	Filed

Description

[0001] This is a Continuation Application filed under 35 U.S.C. §120 as a continuation of U.S. patent application Ser. No. 11/794,825, filed on Jul. 6, 2007, which was a National Phase under 35 U.S.C. §371 of International Application No. PCT/IL2005/000035, filed on Jan. 11, 2005, the content of each of which is hereby incorporated by reference in their entirety.

FIELD OF THE INVENTION

[0002] This invention relates to the broadcast of audio/video content over the TV infrastructure and Internet.

BACKGROUND OF THE INVENTION

[0003] With the proliferation of cable TV and the high bandwidth currently available for the Internet, which promises to increase even more in the near future, Internet TV is fast becoming a viable alternative to regular and cable TV broadcast channels. Moreover, Internet TV is not subject to the government licensing laws required by cable and broadcast TV channels and thus offers programs that may not be obtainable using regular and cable TV broadcast channels.

[0004] It is not uncommon for Internet broadcasters to offer near DVD-quality movies that can be viewed either using video streaming or downloaded to the hard disk of a subscriber's computer for viewing "off-line". The video quality of such movies is vastly superior to that obtainable on a regular TV set, owing to the high resolution associated with computer displays that cannot presently be matched by TV screens. However, this is not particularly troublesome where only pictures are displayed; but it becomes a problem when textual information is displayed that is formatted for high resolution computer monitors since the text is then barely legible when displayed on lower resolution TV screens. Thus, if a regular TV set is used to display Internet content that is rich in text, the resulting display quality is poor.

[0005] It would therefore be a significant benefit to users of low resolution displays such as TV screens, to be able to watch regular and cable TV broadcasts and to integrate with Internet content on demand. In particular, it would be desirable to provide such a user with a visual and legible indication when viewing a regular or TV broadcast of available Internet movies or other programs and allow him to use the displayed indication to integrate with a desired Internet broadcast.

[0006] These requirements have been only partially addressed in the art. WO 00/08855 to United Video Properties, Inc. and entitled "A system and method for synchronizing television-related product content and internet-delivered information" describes a screen generator that merges program guide data with a TV image and superimposes an Interactive TV Guide on the regular TV image.

[0007] US 2002/0093594 (Kikinis) entitled "Method and system for identifying addressing data within a television presentation" illustrates in FIG. 5 the common connection of TV and Internet to a set-top box.

[0008] U.S. Pat. No. 6,606,746 to OpenTV, Inc. entitled "Interactive television system and method for displaying a graphical user interface using insert pictures" discloses interactive television having a compressed background picture and one or more compressed insert pictures commonly connected to a TV-Internet Integration box. The compressed insert pictures represent items of a GUI. The local system i.e. computer "pastes" the insert pictures into the background image.

[0009] U.S. Pat. No. 6,130,898 to Bell Atlantic Network Services, Inc., entitled "Simulcasting digital video programs for broadcast and interactive services" teaches an interactive TV system where TV broadcast data is merged with Internet data. To this end, public wireless packet data network is combined with a broadband digital broadcast network at a plurality of transmitter sites. Customer premises receiving systems include a receiving antenna and one or more digital entertainment terminals. The terminal includes a channel selector and digital receiver for capturing a digital transport stream from a selected channel. A processor converts selected program information from the transport stream for presentation, e.g. via a television set. The terminal also includes a CPU controlling the operation of the channel selector and the processor in response to user inputs.

[0010] None of these references appears to disclose the ability to merge broadcast TV signals with IP packet data at a customer site, specifically in such a manner that a conventional TV set is able to display Internet program selection data while viewing a TV broadcast program and to use the selected data to select an Internet channel, such as a movie, for display on the TV set instead of the TV broadcast program.

SUMMARY OF THE INVENTION

[0011] It is therefore an object of the present invention to provide a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site.

[0012] It is a further object that such a TV-Internet Integration Box permits a TV set connected thereto to display Internet program selection data while viewing a TV broadcast program and to use the selected data to select an Internet movie for display instead of the TV broadcast program.

[0013] These objectives are realized in accordance with a first aspect of the invention by a method for facilitating first data broadcast over a TV subscriber channel to be displayed simultaneously together with second data broadcast over a digital data communications network, the method comprising:

[0014] receiving said first data and said second data;

[0015] combining said first data and said second data to form a combined video signal; and

[0016] conveying said combined video signal to a TV set in a user premises for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data, said second image being configured to allow a user at said user premises to interact therewith for redirecting to the digital data communications network and displaying a program broadcast thereby in at least a portion of the TV set.

[0017] In accordance with a second aspect of the invention there is provided a method for facilitating first data broadcast over a TV subscriber channel to be displayed simultaneously together with second data broadcast over a digital data communications network, the method comprising:

[0018] receiving said first data at a user premises;

[0019] receiving said second data at the user premises according to a user-profile associated with the second data;

[0020] combining said first data and said second data to form a combined video signal; and

[0021] conveying said combined video signal to a TV set in a user premises for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data, said second image being configured to allow a user at said user premises to interact therewith for redirecting to the digital data communications network and displaying a program broadcast thereby in at least a portion of the TV set.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] In order to understand the invention and to see how it may be carried out in practice, a preferred embodiment will now be described, by way of non-limiting example only, with reference to the accompanying drawings, in which:

[0023] FIG. 1 is pictorial representation showing a TV-Internet Integration Box according to the invention connected to a mixed broadcast network for combining Internet and broadcast TV signals;

[0024] FIG. 2 is a flow diagram showing the principal actions carried out by the web server shown in FIG. 1;

[0025] FIG. 3 is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box shown in FIG. 1;

[0026] FIG. 4 is a flow diagram showing the principal actions carried out by an IP content provider such as an advertiser for creating IP content for overlaying by the TV-Internet Integration Box with a broadcast TV signal;

[0027] FIG. 5 is a block diagram showing the functionality of the TV-Internet Integration Box shown in FIG. 1;

[0028] FIG. 6 is a block diagram showing the functionality of a remote control unit for interfacing with the TV-Internet Integration Box shown in FIG. 5;

[0029] FIGS. 7*a*, 7*b* and 7*c* are pictorial representations showing a TV set during different stages of receiving and displaying combined Internet and broadcast TV signals; and

[0030] FIG. 8 is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box when pre-fetching a digital broadcast signal.

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

[0031] FIG. 1 is pictorial representation showing a mixed broadcast network **10** having a Cable TV Box **11** coupled to a satellite **12** and a Cable TV transmitter **13** for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server **14** via the Internet **15** (constituting a digital data communications network) to a TV-Internet Integration Box **16** for display on a TV set **17** coupled thereto. The TV set **17** may be constituted by a computer having a video card and a high resolution display monitor. However, the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box **16** is connected to the Cable TV Box **11** for combining the broadcast TV signals received by the Cable TV Box **11** with the IP packet data broadcast via the Internet **15**. Also shown is an advertiser **18** having a computer coupled to the Internet **15** for downloading advertising content to the web server **14** for storage in a database **19** and a telephone **20** coupled to the TV-Internet Integration Box **16** for feeding telephony signals to the TV-Internet Integration Box **16**, which combines the received telephony signals with video data received from the Cable TV Box **11** and/or the Internet **15**.

[0032] The advertiser **18** typically pays for specific time slots and for one or more specific channels during which his advertisement will be broadcast. Thus, in addition to the advertising content which is prepared and then stored on the web server **14** in known manner, the advertiser **18** also specifies when the advertisement is to be broadcast and on which TV channel or channels. By such means, a sports advertiser can request time during the interval of a football match to broadcast a commercial, while a toy advertiser would obviously prefer to broadcast a commercial during a children's TV program. Different time slots may be charged out at different rates depending on the ratings associated with the associated TV program. After selecting one or more time slots, the advertisement content as well as the selected time slots and program data are stored in the database **19** accessed by the web server **14**.

[0033] FIG. 2 is a flow diagram showing the principal actions carried out by the web server **14**, which is responsive to an event timetable stored and updated in the database **19**. To this end, an IP content provider interfaces with the web server for creating IP content and associating therewith calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises. Once this is done, the web server **14** monitors events, which are triggered in known manner causing the web server **14** to extract from the database **19** pre-stored IP content for streaming over the Internet **15** to the TV-Internet Integration Box **16**, where it is processed as described below with reference to FIG. 3 of the drawings.

[0034] FIG. 3 is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box **16**. In accordance with one embodiment of the invention, the subscriber selects what kind of IP content he wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed together with the TV broadcast data. For example, a subscriber may wish to block certain types of program material or may wish to receives details thereof only during limited hours, for example when the children are asleep. To this end, the subscriber is able to program the TV-Internet Integration Box **16** in much the same way that a video cassette recorder is programmed so as to store in the memory **25** a timetable indicating what type of IP data is to be displayed and when. The timetable is updated as and when required by the subscriber. The TV-Internet Integration Box **16** is adapted to check the timetable periodically and to filter out incoming IP content that is either of a type that is not required or that is broadcast during an unauthorized time window. By such means, an additional layer of authorization may be provided to that stored in the database **19** for access by the web server **14**, thus allowing pre-fetching of IP content and storage in the memory **25** of the TV-Internet Integration Box **16**. Upon detecting a matching event, corresponding to received IP content that is of interest to the subscriber, the TV-Internet Integration Box **16** overlays the matched IP content with the current broadcast and displays the new integrated video on the subscriber's TV set **17**. For example, the matched information may be an icon that indicates to the subscriber that an Internet movie is currently being broadcast; or it may be an advertisement or information related to the TV program being broadcast.

[0035] The subscriber can respond to the overlaid data using a remote control unit, described below with reference to FIG. 6 of the drawings, which is programmed to interact with the displayed icon or other data that is overlaid on the TV broadcast. To this end, the displayed IP content may optionally contain textual information advising the subscriber to press a particular button on the remote control unit. Alternatively, buttons on the remote control unit may be color-coded and the icon may be colored so as to indicate to the subscriber which color-coded button to press for selection of the corresponding IP content. If the subscriber responds to the overlaid data by pressing a button on the remote control unit, the TV-Internet Integration Box **16** receives the signal from the remote control unit and changes the priorities for use with the Picture-in-Picture (PIP) technique to display the TV broadcast in a reduced window and to show the other media, i.e. the IP content, in an enlarged window. The IP content can be a custom designed web page for TV, or a game or advertisement movie or any other information placed on the matched record. PIP techniques are known per se and allow a video or graphics image to be inserted on top of a movie clip and to be positioned and sized. An Effect In and Effect Out may be used to fade or move the inserted video to the screen. In accordance with one such technique, the bulk of the IP content e.g. corresponding to a movie may be rendered transparent so as to provide a transparent window through which an icon e.g. relating to the movie is visible. The video content of the TV broadcast is displayed in one window and the IP content in another window. Since the bulk of the IP content is transparent it will remain invisible to the subscriber, while the icon (or text) will be visible since it is opaque. On selecting the displayed icon, the attributes may simply be reversed so as to hide the icon while displaying the movie or other content. At the same time, the TV broadcast may be re-sized either to display it in a minimized window it the case that it is to be suppressed altogether, or to display it superimposed on the IP content so that both are visible at the same time in different, possibly overlapping, windows.

[0036] FIG. 4 is a flow diagram showing the principal actions carried out by an IP content provider such as an advertiser for creating IP content for overlaying by the TV-Internet Integration Box with a broadcast TV signal. Thus, the advertiser designs an advertisement and sends it together with a request to a web site link via the Internet or off-line as required. Since the IP content is intended for display on a low resolution TV screen, any textual information that forms part of the IP content is formatted so as to be legible when displayed on lower resolution TV screens. Generally, this requires reducing the quantity of textual information to a minimum and sizing any text so that it is legible. Often, a web advertiser will wish to create an on-line advertisement based on an existing web page. In such case, it may be necessary to reduce and resize any textual information so as to comply with these requirements.

[0037] The request specifies calendar and program data as explained above, which the web site operator checks for availability and type, defining to which group of users it belongs. If the required time slots are available for the requested channels, the site operator confirms the request and forwards the request to the web control room for final confirmation. On confirming the request, a status flag of the advertisement is changed so as to indicate that the advertisement is awaiting final confirmation from the web control room. At the web control room the advertisement is checked for content by human evaluators who either approve or reject the advertisement content and, in the case of rejection, may provide reasons therefore. If the advertisement (or other IP content) is approved by the web control center, its status is set to "approved" and the web control center bills the customer and the web site operator adds the advertisement and the scheduling information to the database **19**. The customer who is billed is typically the advertiser but may be any entity that is identified by a digital signature associated with the advertisement. If either of the requests for approval is rejected the status of the advertisement is set to "rejected" and the web control room informs the advertiser of the grounds for rejection, allowing the advertiser to change the request and re-send to the web site operator. Optionally, in such case the web server may be adapted to display to the advertiser the occupied timetable and suggest new timetable. Only those advertisements whose status flag indicates that they are approved by the web control room

are actually available for transmission. The time slot and channel information associated with any advertisement that is not so approved remain available for other advertisements and will be shown as available to another advertiser who attempts to schedule an advertisement. Only when the advertisement is actually approved by the web site operator and its status is updated accordingly, are the transmission time and channel locked for use by other users.

[0038] The IP packet data may optionally be associated with predefined user-profiles that are also stored in the database **19** so that the advertisement or other IP data is sent only to specific TV-Internet Integration Boxes. Such user-profiles may be configured by the advertiser or by the user. Thus, for example, the invention allows supplementary or complementary program content to be associated with a TV broadcast, while providing the facility to view the supplementary program content only to specific subscribers, according to their user-profiles.

[0039] Thus, by way of non-limiting example, the invention allows sign language to be associated with a TV broadcast for the hard of hearing. It is known to display sign language in a corner of the screen, but since this is usually done indiscriminately it also apt to disturb the majority of viewers who do not need the sign language. The invention may be used to avoid this by conveying the sign language as IP content separate from main TV broadcast and allowing subscribers to register for a "sign language" service so that only registered subscribers receive the IP content. IP content files corresponding to sign language to be associated with different TV broadcasts are created as explained above, and stored in the database **19** together with user-profile data indicating which subscribers are registered to obtain the service. The user-profile data may contain data that further refines the target audience, such as categories of TV program alongside which the sign language is to be displayed. The user-profile data may further contain geographical data or language data that allows sign language corresponding to a target language to be conveyed to specific audiences. By such means, a TV program can be accompanied by a sign language overlay that is customized to a target language depending on the location of the IP target address or the language requested by the subscriber on registering for the service.

[0040] FIG. 5 is a block diagram showing the functionality of the TV-Internet Integration Box **16** shown in FIG. 1. Thus, the TV-Internet Integration Box **16** comprises a first input **21** for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input **22** for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with predefined user-profiles associated with IP packet data and stored in the database **19**. A combiner unit **23** is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output **24** is coupled to the combiner unit **23** for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

[0041] The combiner unit **23** is shown coupled to a processing unit **25** although in practice it may be implemented in software by the processing unit **25**. A memory **26** is coupled to the processing unit **25** for storing program data, such as profiles and program timetables etc. so as to allow the processing unit **25** to filter incoming IP content according to pre-defined profiles and other selection data. The processing unit **25** is also coupled to a user interface **27** that allows the subscriber to program the TV-Internet Integration Box **16** and store the program data in the memory **26**. An IR receiver **28** is adapted to receive IR commands from a remote control unit described below with reference to FIG. 6 and is coupled to a decoder **29**, which decodes a received IR signal and feeds it to the processing unit **25** for further processing.

[0042] FIG. 6 is a block diagram showing the functionality of a remote control unit **30** for interfacing with the TV-Internet Integration Box **16** shown in FIG. 5. The remote control unit **30** includes a processing unit **31** coupled to a user interface **32**, typically having a keypad or pushbuttons for program selection and setting as well as other functions. The user interface **32** is coupled to an encoder **33** which is responsive to a pressed key or key combination for producing a corresponding IR signal that is transmitted by an IR transmitter **34** to the TV-Internet Integration Box **16** for receipt by the IR receiver **28** thereof.

[0043] As noted above, the keys may be color coded in correspondence with pre-arranged colors of commonly displayed icons, so that pressing on a specific key activates the displayed icon of the same color. Alternatively, at least some of the keys may be covered with transfers depicting commonly displayed icons, whereupon the appropriate keys or button for activating each icon are easily recognized.

[0044] The keys may also be programmed so that depressing the same key more than once automatically re-sizes the windows containing the TV broadcast and the Internet broadcast. For example, FIG. 7*a* shows the default situation where a TV screen **40** displays a conventional TV broadcast in a window **41** that is sized to occupy the whole area of the TV screen **40** and will be referred to as the primary window. Also shown are IP icons **42**, **43** and **44** each of which points to a different IP content that is streamed from a respective web site of known address. On pressing the key on the remote control unit **30** that corresponds to the icon **42**, the IP content corresponding thereto is displayed within a small window **45** (referred to as the secondary window) that is contained within the primary window **41** as shown in FIG. 7*d*. The icons **42**, **43** and **44** remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit **30**. On pressing a key a second time in succession, the IP content is re-sized so that its window **45** occupies substantially the whole area of the screen as shown in FIG. 7*c*. On pressing the key a third time in succession, the situation reverts to the default shown in FIG. 7*a* where the primary window **41** containing the TV broadcast occupies the whole area of the TV screen **40**. Thus, each key operates as a three-way toggle that switches between three different display modes.

[0045] The second data containing display information for the icons also contains data that informs the TV-Internet Integration Box **16** on which channel or channels the associated IP content is to be streamed and at what times. The second data also specifies the web site where the IP content is located. This is summarized in the following table:

[0046]

TABLE I

Second data - definition

Icon image	Channel	Time	Website of IP content
ICON.GIF	2; 23	19:30; 21:30	www.AB.com/adverts/123.htm

[0047] Thus, the second data depicted in Table I above shows that the icon image is contained in a file called ICON.GIF and that the IP content relating thereto is to be streamed on channels 2 and 23 at times 19:30 and 21:30, these being the start times. The end times are determined by the duration of the IP content to be streamed, which is downloaded from a web site whose name is shown in the table and is contained in the second data.

[0048] The second data is downloaded from the web server **14** whose web site address is known to the TV-Internet Integration Box **16**. In accordance with one embodiment, the processing unit **25** is programmed to access the web server **14** periodically and download current program data. For example, once every 2 to 3 hours the TV-Internet Integration Box **16** may automatically access the web server **14** to download the second data corresponding current program data for the next 3 hours as formatted according to Table I. The downloaded information is stored locally in the memory **26** of the TV-Internet Integration Box **16**. This allows the TV-Internet Integration Box **16** to pre-fetch IP content relating to all the currently displayed icons and to store the data relating thereto in the memory **26** thus obviating the need to access the web site of a selected icon for the purpose of downloading IP selected content. Since this carries the overhead of web access and downloading of data, which can be cumbersome particularly if there is insufficient bandwidth, pre-fetching in this manner ensures that initial IP content data will be immediately available on selection of one of the icons.

[0049] FIG. 8 is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box when pre-fetching a digital broadcast signal. Thus, the TV-Internet Integration Box **16** periodically accesses the web server **14** and downloads current program data, constituting the second data. It then extracts from the current program data the image files of the current icons and stores them in the memory **26**. In like manner, it extracts the web sites of the IP content corresponding to the currently displayed icons and then accesses these sites to pre-fetch the respective IP content, which it likewise stores in the memory **26**. On selection of an icon, the TV-Internet Integration Box **16** opens a secondary window **45** within the primary window **41**, reads from the memory **26** the pre-fetched IP content and displays it in the secondary window **45**.

[0050] It will be understood that the TV-Internet Integration Box according to the invention may be at least partially implemented by a suitably programmed computer. Likewise, the invention contemplates a computer program being readable by a computer for executing the method of the invention. The invention further contemplates a machine-readable memory tangibly embodying a program of instructions executable by the machine for executing the method of the invention.

Original

Classifications

IPC	CPC	US Class
H04N21/443	H04N21/4316	725/110
H04N21/431	H04N21/4381	
H04N21/438	H04N21/4438	
H04N21/462	H04N21/4622	
H04N21/4782	H04N21/4782	
H04N21/643	H04N21/64322	
	H04N21/431	
	H04N21/4331	
	H04N21/44016	
	H04N21/6118	
	H04N21/6125	
	H04N21/6143	
	H04N21/812	
	H04N21/854	

Persons

Ultimate Owner

Original
TVNGO (/api/control?query=uo:("TVNGO")&autosearch=true)
TVNGO BVI (/api/control?query=uo:("TVNGO%20BVI")&autosearch=true)

Original Assignees

Original	Standardized	Normalized
Yaakov Merlin (/api/control?query=pa:("Yaakov%20Merlin")&autosearch=true) Raanana, State of Israel, IL		

Current Assignees

Original	Standardized	Normalized
TVNGO LTD. (BVI) (/api/control?query=pacu:("TVNGO%20LTD.%20(BVI)")&autosearch=true) 204 RAPPENBURGER STRAAT1011 MN, AMSTERDAM, NETHERLANDS	TVNGO LTD. BVI (/api/control?query=pacus:("TVNGO%20LTD.%20BVI")&autosearch=true)	

Inventor(s)

Original
Yaakov Merlin (/api/control?query=in:("Yaakov%20Merlin")&autosearch=true) Raanana, State of Israel, IL

Legal representative(s)

Original	Standardized	Normalized
Ivan S. Kavrukov (/api/control?query=ag:("Ivan%20S.%20Kavrukov")&autosearch=true)		
Cooper & Dunham (/api/control?query=ag:("Cooper%20%26%20Dunham")&autosearch=true)		

Legal information

Standardized Post issuance INPADOC

Legal status

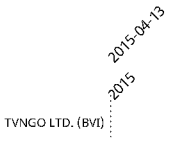
Event	Date	Description

Granted	2016-08-02	GRANTED
Filed	2011-12-23	FILED

Designated states

Date	Event code	Description

Ownership



Payment status

Date	Status	Event code	Description
2019-11-15	Fee paid	M2551	PAYMENT OF MAINTENANCE FEE, 4TH YR, SMALL ENTITY.

Litigation/Opposition

Docket number	Docket description	Court	Date Filed
2:18cv10238	Tvngo Ltd. (Bvi)	US District Court for the District of New Jersey	2018-06-05
20-1837	TVnGO Ltd. (BVI) v. LG Electronics, Inc.	US Court of Appeals for the Federal Circuit	2020-05-25
1:18cv10238	Tvngo Ltd. (Bvi) V. Lg Electronics, Inc. Et Al	United States District Court, New Jersey	2018-06-05

Page: 1

Pharmaceuticals

Product	Type	Active Ingredient	Applicant	Application No.	Application Type	Approval Date	Patent Expiry Date	Patent usage code	Exclusivity Code	Exclusivity Date	Dosage	Strength	Product Number	Route	RLD	Patent Delist Requested	Exclu Text

No pharmaceuticals data

Citations

Display in a list (/api/control?citationsSearch=)

backwa...	US6136898A	By applicant	2000-10-24	Unblown ethylene-vinyl acetate copolymer treated asphalt and its method of preparation	MARATHON ASHLAND PETROLEUM ASHLAND	

☐	backwa...	US6240555B1	By applicant	2001-05-29	Interactive entertainment system for presenting supplemental interactive content together with continuous video programs	MICROSOFT	
☐	backwa...	US6351270B1	By applicant	2002-02-26	Miniature video in the guide logo	SONY SONY ELECTRONICS	
☐	backwa...	US6606746B1	By applicant	2003-08-12	Interactive television system and method for displaying a graphical user interface using insert pictures	OPENTV	
☐	backwa...	US7124430B2	Cited by the examiner	2006-10-17	Television signal reception apparatus and method, and broadcast reception apparatus and method		
☐	backwa...	US7340457B1	Cited by the examiner	2008-03-04	Apparatus and method to facilitate the customization of television content with supplemental data		
☐	backwa...	US7456902B2	By applicant	2008-11-25	Method and system for identifying addressing data within a television presentation		
☐	backwa...	US20020007493A1	Cited by the examiner	2002-01-17	PROVIDING ENHANCED CONTENT WITH BROADCAST VIDEO	BUTLER LAURA J MOORE GEORGE M	
☐	backwa...	US20040107437A1	Cited by the examiner	2004-06-03	Systems and methods for coordinating interactive and passive advertisement and merchandising opportunities	UNITED VIDEO PROPERTIES	
☐	backwa...	WO0008855A1	By applicant	2000-02-17	A SYSTEM AND METHOD FOR SYNCHRONIZING TELEVISION-RELATED PRODUCT CONTENT AND INTERNET-DELIVERED INFORMATION	UNITED VIDEO PROPERTIES	
☐	backwa...	WO0219689A2	By applicant	2002-03-07	SYSTEM FOR INTERACTIVE TELEVISION	SONY ELECTRONICS	

1 - 11 of 11

Similar documents

Display in a list (/api/control?similarSearch=_)

The similarity check is done by matching this document to all documents in the database. Only the title and abstract text are matched, resulting in a score. The 10 highest-scoring documents are displayed here.

☐ All

☐ Integrating, at user's premises, TV channel format material with IP format material through overlays

Publication number US9124945B2
Publication date 2015-09-01
Application date 2011-12-23

A method for displaying a TV broadcast signal and Internet signal on a a TV. Preferably, a Web link image is displayed on the TV, which a user can select to display IP content.

☐ METHOD FOR DISPLAYING TV BROADCAST SIGNAL AND INTERNET SIGNAL ON TV

Publication number US20120096506A1
Publication date 2012-04-19
Application date 2011-12-23

A method for displaying a TV broadcast signal and Internet signal on a a TV. Preferably, a Web link image is displayed on the TV, which a user can select to display IP content.

☐ TV SYSTEM FOR DISPLAYING TV BROADCASTS SIGNAL AND INTERNET SIGNAL

Publication number US20120096507A1
Publication date 2012-04-19
Application date 2011-12-23

A TV system for displaying TV broadcast signal and Internet signal. Preferably, the TV system is configured to simultaneously or selectively display the TV broadcast signal and Internet signal.

☐ Network TV system and remote control device of network TV system

Publication number TW201029459A
Publication date 2010-08-01
Application date 2009-01-23

A network TV system is suitable for connecting to the Internet to receive an audiovisual signal outputted by a network TV server and displaying the same. The network TV system comprises: a viewing device connected with the Internet and a remote control device for controlling the operation of the viewing device. The remote control device has a signal transceiver electrically connected to the viewing unit and capable of transmitting and receiving wireless signals, and a remote control unit having a plurality of function buttons, a communication device for

transmitting the control signal with the signal transceiver for transmitting and receiving wireless signals, and a display. Users can press the function buttons to form control signals which are sent by the communication device to the signal transceiver and transmitted to the viewing device for immediately downloading program lists from the network TV server and transmitting the

same via the signal transceiver to the remote control unit such that the program lists can be displayed on the display.

☐ Internet TV and remote controller device and method for displaying character information between

Publication number KR1019990001923A
Publication date 1999-01-15
Application date 1997-06-18

The present invention refers to relates to Internet TV display device and method, more specifically the reader in Internet TV screen of the compressed spring increases and accepts the information on the Internet to a remote control received at read are used to identify the Internet TV and remote controller for displaying character information between relates to device and method. Between Internet TV and remote controller for displaying stored data on a in device, web browser in TV transmitted by the character during information on the Internet to extract information character information extraction section, said character information extraction section extracted from character information for storing a reservoir for, said character data is for Korean alphabet information stored at the storing unit with a radio frequency signal for transmitting the wireless signal transmitting section, said character information from the first information processing of transmitting radio signals receives and displays and Internet for connection web linking button according to the sending Internet TV signal includes control lamp of the remote. According to the present invention, Internet TV large screen the reader in the compressed spring increases and accepts the information on the Internet to a remote control received at read since it is possible to information collection convenience of the..

☐ APPARATUS AND METHOD FOR DISPLAYING CHARACTER INFORMATION BETWEEN INTERNET TV AND REMOTE CONTROLLER

Publication number KR100238291B1
Publication date 1999-10-13
Application date 1997-06-18

PURPOSE: An apparatus and method for displaying character information between an internet TV and a remote controller is provided to receive and read internet information which is inconvenient to read on a screen of an internet TV by receiving information thorough a remote controller. CONSTITUTION: A user for wanting an internet communication drives an internet TV(300). If the internet TV is driven, the user pushes a web connection key to connect the internet TV to the internet(310). The user judges whether the internet TV is connected with the internet through a screen of the internet TV(320). If the internet TV is connected with the internet, a corresponding web server transmits a web document to the internet TV(330). It is judged whether the transmission for transmitting the web document from the corresponding web server to the internet TV(330) is completed(340). If the transmission is completed, the web document is displayed on the screen of the internet TV(350). The corresponding web server transmits the web document to the internet TV and simultaneously extracts character information from the web document to store extracted character information in a memory(360). Character information stored in the memory is transmitted to a wireless signal receiving unit of a remote controller(370). Character information transmitted to the remote controller is displayed on a liquid crystal panel(380). COPYRIGHT 2001 KIPO

☐ Internet linkage with broadcast TV

Publication number EP901284A2
Publication date 1999-03-10
Application date 1998-08-26

Signals corresponding to Uniform Resource Locators (URL's) are inserted directly into a broadcast television signal, advantageously in portion of the vertical blanking interval available for closed captioning information. When a television signal with the embedded URL is received in an Internet capable television, the presence of the URL is indicated to the viewer, such as by causing a small, transparent, overlay icon to be displayed on the TV screen. When a viewer thereafter actuates a special button on their wireless (infrared), or wired, remote control, the URL information contained in the television signal is extracted and sent to the portion of the television, or auxiliary device, used to establish an Internet connection. The viewer is then able to gain access to the Internet site having the address specified by the URL, which site will generally contain information associated with the television programming. <IMAGE>

☐ Internet linkage with broadcast TV

Publication number EP901284A3
Publication date 1999-05-19
Application date 1998-08-26

Signals corresponding to Uniform Resource Locators (URL's) are inserted directly into a broadcast television signal, advantageously in portion of the vertical blanking interval available for closed captioning information. When a television signal with the embedded URL is received in an Internet capable television, the presence of the URL is indicated to the viewer, such as by causing a small, transparent, overlay icon to be displayed on the TV screen. When a viewer thereafter actuates a special button on their wireless (infrared), or wired, remote control, the URL information contained in the television signal is extracted and sent to the portion of the television, or auxiliary device, used to establish an Internet connection. The viewer is then able to gain access to the Internet site having the address specified by the URL, which site will generally contain information associated with the television programming.

☐ INTERNET LINKAGE WITH BROADCAST TV

Publication number CA2246023A1
Publication date 1999-03-05
Application date 1998-09-01

Signals corresponding to Uniform Resource Locators (URL's) are inserted directly into a broadcast television signal, advantageously in portion of the ve rtical blanking interval available for closed captioning information. When a television signal with the embedded URL is received in an Internet capable television, the presence of the URL is indicated to the viewer, such as by causing a small, transparent, overlay icon to be displayed on the TV screen. When a viewer therea fter actuates a special button on their wireless (infrared), or wired, remote control , the URL information contained in the television signal is extracted and sent to the portion of the television, or auxiliary device, used to establish an Internet connection . The viewer is then able to gain access to the Internet site having the address speci fied by the URL, which site will generally contain information associated with the telev ision programming.

☐ Of Internet TV connection control device and method

Publication number KR1019990039529A

The present invention refers to a connection information of a corresponding program and to

Publication date.....1999-06-05
Application date.....1997-11-13

Internet temperature and pressure in functions to control information displayed on a new window search a straight form to a spiral form of Internet TV connection control device and method relates to, a device connection control of Internet TV of the present invention the usual Image signal and Image information on Internet in Internet TV, an accounting system having a controlling the positions for storing and using the same positions to control the movement of the adjusting, for retrieving information on Internet that the web browser, which, in a search through a web browser said selectively store positions history summer department and , said web browser a search through a if there is the specific specific site of Internet, connects to the Internet connecting and, said Internet via an optionally a viewable Image or voice information to the processor and a video/audio, said video processor/audio processor an audio signal outputted from a, each video signal and an amplifying amplified output, said video and audio to a watched by a user to CRT displaying, voice signal externally. for melting air in water by it to the output to a speaker including consists of.

1
1

LexisNexis

User Name: Renee Preston
Date and Time: Tuesday, July 26, 2022 8:21:00 AM EDT
Job Number: 176008883

Documents (3)

1. *US Patent Issued to TVGOLTD on Aug. 2 for "Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material" (Israeli Inventor)*

Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
News	-None-

2. *Head Line: US Patent granted to TVGOLTD on August 2, 2016 titled as "Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material"*

Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
News	-None-

3. *Tvgoltd Secures Patent on Forming Overlays at User's Premises and Utilizing Them for Selective Combinations of TV Broadcast Channel Format Material and IP-Format Material*

Client/Matter: -None-
Search Terms: 9407969 or 9,407,969
Search Type: Terms and Connectors
Narrowed by:

Content Type	Narrowed by
News	-None-

US Patent Issued to TVGOLTD on Aug. 2 for "Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material" (Israeli Inventor)

US Fed News

August 2, 2016 Tuesday 2:10 PM EST

Copyright 2016 HT Media Ltd. All Rights Reserved

Length: 168 words

Dateline: ALEXANDRIA, Va.

Body

ALEXANDRIA, Va., Aug. 2 -- United States Patent no. ***9,407,969***, issued on Aug. 2, was assigned to TVGOLTD (Amsterdam).

"Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material" was invented by Yaakov Merlin (Raanana, Israel). According to the abstract* released by the U.S. Patent & Trademark Office: "A method of displaying an Internet signal on a TV. Preferably, at least a portion of the Internet signal is selectively displayed by a remote activation control signal." The patent was filed on Dec. 23, 2011, under Application No. 13/336,189. *For further information, including images, charts and tables, please visit: http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&co1=AND&d=PTXT&s1=9407969&OS=9407969&RS=9407969 For any query with respect to this article or any other content requirement, please contact Editor at htsyndication@hindustantimes.com

Load-Date: August 2, 2016

End of Document

Renee Preston

Head Line: US Patent granted to TVGOLTD on August 2, 2016 titled as "Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material"

Plus Patent News

August 3, 2016 Wednesday

Copyright 2016 Plus Media Solutions Private Limited All Rights Reserved



Length: 110 words

Dateline: New York

Body

ALEXANDRIA, Va: United States Patent and Trademark Office has granted patent no. ***9,407,969*** on August 2, 2016, to TVGOLTD titled as "Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material"

Inventors: Merlin; Yaakov (Raanana, IL)

Assignee: TVGOLTD (Amsterdam, NL)

According to the abstract released by the U.S. Patent & Trademark Office: "A method of displaying an Internet signal on a TV. Preferably, at least a portion of the Internet signal is selectively displayed by a remote activation control signal."

The patent was filed on December 23, 2011 Application No. 13/336,189

Load-Date: August 3, 2016

End of Document

Renee Preston

Tvgoltd Secures Patent on Forming Overlays at User's Premises and Utilizing Them for Selective Combinations of TV Broadcast Channel Format Material and IP-Format Material

Global IP News. Software Patent News

August 2, 2016 Tuesday

Copyright 2016 ProQuest Information and Learning
All Rights Reserved
Copyright 2016 Globalipnews.com

Length: 214 words

Dateline: New Delhi

Body

FULL TEXT

Publication Name: Software Patent News**Patent Application Number:** 13/336,189**Patent Publication Number:** ***9,407,969*****International Patent Classification Codes:** H04N 21/64322 (20130101), H04N 21/4316 (20130101), H04N 21/4381 (20130101), H04N 21/4438 (20130101), H04N 21/4622 (20130101), H04N 21/4782 (20130101)**Patent Status:** Granted

Alexandria, Aug. 2 -- Tvgoltd has secured a patent on forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material. Merlin Yaakov developed the invention. The patent application number is 13/336,189. The International Patent Classification codes are H04N 21/443 (20110101), H04N 21/462 (20110101), H04N 21/438 (20110101), H04N 21/431 (20110101), H04N 21/643 (20110101) and H04N 21/4782 (20110101). Cooperative Patent Classification codes are H04N 21/64322 (20130101), H04N 21/4316 (20130101), H04N 21/4381 (20130101), H04N 21/4438 (20130101), H04N 21/4622 (20130101) and H04N 21/4782 (20130101).

The abstract released by U.S. Patent and Trademark Office states, "A method of displaying an Internet signal on a TV. Preferably, at least a portion of the Internet signal is selectively displayed by a remote activation control signal."

Copyright© 2016, Globalipnews.com

Load-Date: August 3, 2016

End of Document

Renee Preston

User Name: Renee Preston
Date and Time: Tuesday, July 26, 2022 7:09:00 AM EDT
Job Number: 176005832

Document (1)

1. *2:18cv10238, Tvnqo Ltd. (Evi)*
   Client/Matter: -None-
   Search Terms: 9407969 or 9,407,969
   Search Type: Terms and Connectors
   Narrowed by:

Content Type	Narrowed by
Dockets	-None-

2:18cv10238, Tvngo Ltd. (Bvi)

US District Court Docket

US District Court for the District of New Jersey

(Newark)

This case was retrieved on 06/06/2018

Header

Case Number: 2:18cv10238
Date Filed: 06/06/2018
Nature of Suit: ***Patent*** (830)
Cause: ***Patent*** Infringement
Lead Docket: None
Other Docket: None
Jurisdiction: Federal Question

Class Code: Open
Statute: 15:1126
Jury Demand: Plaintiff
Demand Amount: $0
NOS Description: ***Patent***

Participants

Litigants

TVnGO LTD. (BVI)
Plaintiff

LG Electronics, Inc.,
Defendant

LG Electronics U.S.A., Inc.
Defendant

Attorneys

MATTHEW TRAVIS EYET
ATTORNEY TO BE NOTICED
SANDELANDS EYET LLP
1545 U.S. Highway 206 Suite 304
Bedminster, NJ 07921
USA
908-470-1200 Email:Meyet@sandelandslaw.Com

Proceedings

#	Date	Proceeding Text	Source
1	06/06/2018	COMPLAINT against LG ELECTRONICS, INC.,, LG ELECTRONICS U.S.A., INC. (Filing and Admin fee $ 400 receipt number 0312-8792992) with JURY DEMAND, filed by TVnGO LTD. (BVI). (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G, # 8 Exhibit H, # 9 Exhibit I, # 10 Exhibit J, # 11 Exhibit K, # 12 Exhibit L, # 13 Exhibit M, # 14 Exhibit N, # 15 Exhibit O, # 16 Civil Cover Sheet)(EYET, MATTHEW) (Entered: 06/06/2018)	
2	06/07/2018	Corporate Disclosure Statement by TVnGO LTD. (BVI). (EYET, MATTHEW) (Entered: 06/07/2018)	Events since last full update
--	06/07/2018	Case assigned to Judge John Michael Vazquez and Magistrate Judge Steven C. Mannion. (jr) (Entered: 06/07/2018)	Events since last full update
3	06/07/2018	SUMMONS ISSUED as to LG ELECTRONICS U.S.A., INC., LG ELECTRONICS, INC., Attached is the official court Summons,	Events since last full update

Renee Preston

#	Date	Proceeding Text	Source
		please fill out Defendant and Plaintiffs attorney information and serve. Issued By *John Reilly* (jr) (Entered: 06/07/2018)	
4	06/07/2018	AO120 ***Patent*** Form filed. (jr) (Entered: 06/07/2018)	Events since last full update
--	06/12/2018	Minute Entry for proceedings held before Judge John Michael Vazquez: Pursuant to Local ***Patent*** Rule 1.5 ***Patent*** Pilot Project, case shall be reassigned to a designated ***patent*** judge. (ro,) (Entered: 06/12/2018)	Events since last full update

Patents

Number	Title	Issued	Class	Subclass
8,132,220	Method and apparatus for facilitating toggling between internet and TV broadcasts	03/06/2012	725	109
9,124,945	Integrating, at user's premises, TV channel format material with IP format material through overlays	09/01/2015	1	1
9,392,339	TV-Internet integration circuit	07/12/2016	1	1
9,407,969	Forming overlays at user's premises and utilizing them for selective combinations of TV broadcast channel format material and IP-format material	08/02/2016	1	1
9,794,621	Method of displaying internet signal on TV	10/17/2017	1	1

Copyright © LexisNexis CourtLink, Inc. All Rights Reserved.
*** THIS DATA IS FOR INFORMATIONAL PURPOSES ONLY ***

End of Document

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 11/29/2022

FISH IP LAW, LLP
2603 Main Street
Suite 1000
Irvine, CA 92614

EXAMINER	
BASEHOAR, ADAM L	

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
11/29/2022	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com
rfish@fishiplaw.com

Office Action Summary	Application No. 17/867,612	Applicant(s) MERLIN, Yakkov	
	Examiner Adam L Basehoar	Art Unit 3992	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 18 July 2022.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL.** 2b) ☑ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-21 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 1-21 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☑ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 18 July 2022 is/are: a)☑ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

2. For reissue applications filed on or after September 16, 2012, all references to 35 U.S.C. 251 and 37 CFR 1.172, 1.175, and 3.73 are to the current provisions.

DETAILED ACTION

3. This is a Non-Final Action responsive to communications: The instant application (i.e., 17/867,612) filed 07/18/2022, which is a reissue of application 13/336,189 (U.S. Patent No. 9,407,969 B2, published 08/02/2016).

4. Claims 1-21 were initially pending in the application. A preliminary amendment to the claims was filed concurrently with the application on 07/18/2022. By way of the preliminary amendment to the claims, claims 1, 3, 5, 9, 10, 13, 15, 17, and 20 have been amended. Said preliminary amendment to the claims has been entered and made of record. Therefore, claims 1-21 are currently pending in the application. Claims 1 and 13 are independent claims.

While not an explicit requirement of 37 CFR 1.173(b)(2), the Examiner suggests that all unamended original claims (i.e., claims 2, 4, 6-8, 11, 12, 14, 16, 18, 19, and 21) of the Merlin '969 patent be preceded by the parenthetical expression "(Original)" for the purpose of consistency and increased clarity in the record.

5. A preliminary amendment to the specification was also filed concurrently with the application on 07/18/2022. The preliminary amendment to the specification has been entered and made of record.

Reissue

6. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 9,407,969 B2 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

7. The patent sought to be reissued by this application has been involved in litigation. Any documents and/or materials which would be material to the patentability of this reissue application are required to be made of record in reply to this action.

8. Applicant is notified that any subsequent amendment to the specification and/or claims must comply with 37 CFR 1.173(b).

Specification

9. The disclosure is objected to because of the following informalities:

Column 4, lines 39 and 48 each recite the "memory 25" in reference to Fig. 5 of the Merlin '969 patent. However, Fig. 5 of the Merlin '969 patent shows that reference number 25 refers to the "Processing Unit" and it is reference number 26 that properly refers to the "memory." Therefore, in each instance, "25" should be replaced with "26."

Appropriate correction is required.

Claim Rejections - 35 USC § 251

10. **Claims 1-21 are rejected** under 35 U.S.C. 251 as being broadened in a reissue application filed outside the two year statutory period.

First, in the instant case, the amendments to independent claims 1 and 13 clearly broaden (see: MPEP 1412.03(I)) said claims by deleting the limitation requiring an "overlay activation criterion" as part of the "overlay-enabling digital data." The deleted "overlay activation criterion" indicating that it comes from the Internet and simultaneously not from the Internet (i.e., from a user's premises). After the amendments to independent claims 1 and 13, said claims now merely require an "event condition" and not an "overlay activation criterion."

A claim is broader in scope than the original claims if it contains within its scope any conceivable product or process which would not have infringed the original patent. A claim would be considered a broadening claim if the Patent Owner would be able to sue any party for infringement who previously could not have been sued for infringement. A claim is broadened if it is broader in any one respect even though it may be narrower in other respects.

Second, in this instance, it is difficult to see how independent claims 1 and 13 of the Merlin '969 patent could be compared to a product or process said to infringe the claims. For example, one cannot read the drawing figures (i.e., Figs. 1-8) of the Merlin '969 patent onto independent claims 1 and 13 of the Merlin '969 patent. This is because independent claims 1 and 13 of the Merlin '969 patent, as noted above, present irreconcilable inconsistencies that render their precise meanings not reasonably certain. Presumably, the amendments to independent claims 1 and 13 are supported by the specification of the Merlin '969 patent, as argued by Applicant in the Remarks, and therefore the drawing figures (i.e., Figs. 1-8) of the Merlin '969 patent can be read onto amended independent claims 1 and 13. Thus, the drawing figures (i.e., Figs. 1-8) of the Merlin '969 patent—if prior art—would anticipate or if used without Applicant's permission would infringe amended independent claims 1 and 13, but would not anticipate or infringe independent claims 1 and 13 of the Merlin '969 patent. It necessarily follows that amended independent claims 1 and 13 enlarge the scope of independent claims 1 and 13 of the Merlin '969 patent, all contrary to 35 U.S.C. 251(d).

11. **Claims 1-21 are rejected under 35 U.S.C. 251** as being improperly broadened in a reissue application made and sworn to by the assignee. The application for reissue may be made and sworn to by the assignee of the entire interest only if the application does not seek to enlarge the scope of the claims of the original patent or, for reissue applications filed on or after September 16, 2012, the application for the original patent was filed by the assignee of the entire interest under 37 CFR 1.46.

As noted above, independent claims 1 and 13 of the Merlin '969 patent have clearly been broadened by the preliminary amendments to said claims.

12. **Claims 1-21 are rejected** under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Greenliant Systems, Inc. et al v. Xicor LLC*, 692 F.3d 1261, 103 USPQ2d 1951 (Fed. Cir. 2012); *In re Shahram Mostafazadeh and Joseph O. Smith*, 643 F.3d 1353, 98 USPQ2d 1639 (Fed. Cir. 2011); *North American Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 75 USPQ2d 1545 (Fed. Cir. 2005); *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to claimed subject matter that Applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope of claim subject matter surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

It is noted that the following is the three step test for determining recapture in reissue applications (see: MPEP 1412.02(II)):

"(1) first, we determine whether, and in what respect, the reissue claims are broader in scope than the original patent claims;

(2) next, we determine whether the broader aspects of the reissue claims relate to subject matter surrendered in the original prosecution; and

(3) finally, we determine whether the reissue claims were materially narrowed in other respects, so that the claims may not have been enlarged, and hence avoid the recapture rule."

(Step 1: MPEP 1412.02(II)(A)) In the instant case and by way of the preliminary amendment to the claims, Applicant seeks to broaden independent patent claims 1 and 13 in this reissue at least by deleting/omitting the substantially similar patent claim language that requires "an overlay activation criterion."

(Step 2: MPEP 1412.02(II)(B)) The record of the prior parent 11/794,825 application prosecution history indicates that in a Response filed on 09/16/2010 by Applicant, original independent patent claims 19 and 29 were amended to at least include the substantially similar limitation of "wherein said overlay-enabling digital data includes at least…an overlay activation criterion" in order to overcome an applied prior art rejection in view of Reichardt. Later in the prosecution history, Applicant further argued that "neither Akiyama or Butler teaches receiving the overlay activation criterion and the video TV signal from two separate sources" (e.g., see: Remarks filed 08/23/2011, pp. 11-13) in order to overcome an applied prior art rejection of Akiyama in view of Butler. Subsequently, a Notice of Allowability was mailed on 09/23/2011 wherein claims 19-39 were allowed.

Subject matter is previously surrendered during the prosecution of the original application by reliance on an amendment to the claims and/or an argument/statement made by Applicant that a limitation(s) of the claim(s) defines over the art. Additionally, reissue recapture applies to related family member applications (See *MBO Laboratories, Inc. v. Becton, Dickinson & Co.*, 602 F.3d 1306 USPQ2d 1598 (Fed. Cir. Apr. 12, 2010) (a more limited recapture rule

would undercut "the rule against recapture's public-reliance rationale" and a patent family's entire prosecution history should be reviewed "when applying both the rule against recapture and prosecution history estoppel.")). It is noted that a Patent Owner (Reissue Applicant) is bound by the amendment and/or argument that Applicant relied upon to overcome an art rejection in the original application for the patent to be reissued or in related family member applications, regardless of whether the Office adopted the amendment and/or argument in allowing the claims. Therefore, due to Applicant's amendments and arguments during the prior parent 11/794,825 application prosecution history, at least the claim limitations requiring "an overlay activation criterion" are considered surrendered subject matter and some of the broadening of independent claims 1 and 13, as noted above, is clearly in the area of the surrendered subject matter.

(Step 3: MPEP 1412.02(II)(C)) First it must be noted that the reissue claims were not materially narrowed in other respects (i.e., the new limitations are not related to the same characteristic or concept as the surrendered subject matter), so that the claims may not have been enlarged, and hence avoid the recapture rule. The added "event condition" limitation is not a new surrender generating limitation (SGL). For instance, as noted above, the intrinsic evidence of the Merlin '969 patent indicates that the "overlay activation criterion" limitation comes from the Internet and simultaneously not from the Internet (i.e., from a user's premises). The added "event condition" limitation does not appear to share this same characteristic or concept as the "overlay activation criterion" limitation.

Second, if a surrender generating limitation (SGL) has been entirely eliminated from a claim present in the reissue application, then a recapture rejection under 35 U.S.C. 251 may be

proper. In the instant case, the surrendered subject matter has been entirely eliminated from independent claims 1 and 13.

Therefore, broadened independent reissue claims 1 and 13 (as well as dependent claims 2-12 and 14-21) attempt impermissible recapture of subject matter surrendered during prosecution of the prior parent 11/794,825 application. To overcome this rejection, all of the surrendered subject matter must be restored in the independent claims.

13. The Reissue Declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

First, the Reissue Declaration does not properly indicate the reasons why the patent is wholly or partially inoperative or invalid. As noted in MPEP 1414(I), "Even though only one error upon which reissue is based needs to be described in the reissue oath/declaration, if PTO/SB/51 or PTO/SB/52 form is used (or PTO/AIA/05 or PTO/AIA/06, for applications filed on or after September 16, 2012), applicant needs to check the appropriate box(es) on the form identifying each of the reasons why the patent is wholly or partly inoperative or invalid. Even if a PTO form is not used, applicant needs to state each of the reasons why the patent is wholly or partly inoperative or invalid in the reissue oath/declaration." Specifically, the Reissue Declaration incorrectly indicates that "by reason of other errors" as the reason why the patent is wholly or partially inoperative or invalid. This box is usually checked to indicate errors related to inventorship or claims to foreign/domestic priority. Because those types of errors do not appear to be corrected by the instant reissue application, the Reissue Declaration fails to properly indicate that the actual errors are based on the scope of the claims and a defective specification. To correct this issue Applicant must uncheck the box for "by reason of other errors" and at least

check the boxes for "by reason of a defective specification or drawing" and "by reason of the patentee claiming more or less than he had the right to claim in the patent."

Second, the Reissue Declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because none of the errors which are relied upon to support the reissue application are errors upon which a reissue can be based. The Examiner notes that broadening the claims after two years from the grant of the original patent is not an error correctable by reissue. Similarly, the recapture of surrendered subject matter is not an error correctable by reissue. Thus, as noted above with regard to claims 1-21, two of the errors provided in the Reissue Declaration (i.e., "One error is a federal court found claims 1, 9, 10, 13, 17, and 20 invalid…A second error is the same court found claims 9 and 20 further invalid as inconsistent with parent claims 1 and 13") to support the reissue application are errors related to broadening the claims after two years and/or the recapture of surrendered subject matter. The third error provided in the Reissue Declaration (i.e., "A third error is claims 1, 3, 5, 13, and 15 have apparent antecedent basis defects and may be invalid") is not specific and thus it has not been shown to be an actual error in the claims that renders the original patent to be wholly or partly inoperative or invalid. Similarly, the fourth-sixth errors are also not specific and thus they have not been shown to be actual errors in the specification and/or claims that render the original patent to be wholly or partly inoperative or invalid. Further, each of the third-sixth errors state that something "may be invalid" which appears to contradict the language of the Reissue Declaration that states "I believe the original patent to be wholly or partly inoperative or invalid" (emphasis added). As noted in MPEP 1414(II)(B), "In identifying the error, it is sufficient that the reissue oath/declaration identify a single word, phrase, or expression in the specification or in an original claim, and how it renders the original patent wholly or partly inoperative or invalid."

Additionally, the Examiner notes that "an error under 35 U.S.C. 251 has not been presented where the correction to the patent is one of spelling, or grammar, or a typographical, editorial or clerical error which does not cause the patent to be deemed wholly or partly inoperative or invalid for the reasons specified in 35 U.S.C. 251" (see: MPEP 1402).

Third, the Reissue Declaration fails to identify an original patent claim that the application seeks to broaden (see: MPEP 1414(II)(B) and 37 CFR 1.175(b)). For an application filed on or after September 16, 2012 that seeks to enlarge the scope of the claims of the patent, the reissue oath or declaration must also identify a claim that the application seeks to broaden. The Examiner notes that it does not appear to be Applicant's intent to broaden the claims. As noted above, Applicant is currently outside the two year statutory period and thus cannot broaden the claims. However, because the claims have indeed been broadened by the preliminary amendment to the claims, the Reissue Declaration is required to conform with 37 CFR 1.175(b).

Appropriate correction is required.

14. **Claims 1-21 are rejected** as being based upon a defective Reissue Declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the Declaration is set forth in the discussion above in this Office action.

Claim Rejections - 35 USC § 112

15. The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. **Claims 1-21 are rejected** under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 1 recites the limitation "the TV tuner box" in line 8. There is insufficient antecedent basis for this limitation in the claim. Dependent claims 2-12 are similarly rejected at least via dependency.

Independent claims 1 and 13 (and associated dependent claims 9, 10, 17, and 20) each newly recite the substantially similar limitations, "wherein said overly-enabling digital data includes…an event condition…only if said event condition is met" (emphasis added). Claims 1 and 13 (and associated dependent claims 9, 10, 17, and 20) are therefore indefinite because the boundaries of the claimed subject matter are not clearly delineated and the scope is unclear. Specifically, "Upon detecting a matching event" is cited in column 4, line 49 of the Merlin '969 patent for providing proper support. However, said citation does not clearly state what subject matter is intended to be covered by the broadly recited "event condition" as compared to the original patented claims which required "an overlay activation criterion." Accordingly, the Merlin '969 patent fails to inform a person of ordinary skill in the art of the claimed invention's scope with reasonable certainty. Thus, independent claims 1 and 13 (and associated dependent claims 9, 10, 17, and 20) are indefinite for not specifically setting forth that which the inventor or a joint inventor regards as the invention.

Dependent claims 2-12 and 14-21 are similarly rejected at least via dependency.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Please note the relevant cited prior art listed on the accompanying Notice of References Cited (Form PTO-892).

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam L Basehoar whose telephone number is (571)272-4121. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kosowski can be reached on 571-272-3744. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADAM L BASEHOAR/
Primary Examiner, Art Unit 3992

Conferees:
/ALEXANDER J KOSOWSKI/
Supervisory Patent Examiner, Art Unit 3992

/JOSHUA D CAMPBELL/
Primary Examiner, Art Unit 3992

Notice of References Cited	Application/Control No. 17/867,612	Applicant(s)/Patent Under Reexamination MERLIN, Yakkov	
	Examiner Adam L Basehoar	Art Unit 3992	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-5990927-A	11-1999	Hendricks; John S.	H04N21/2389	725/132
*	B	US-6510557-B1	01-2003	Thrift; Philip R.	H04N21/4316	725/111
*	C	US-20020144273-A1	10-2002	Reto, Wettach	H04L65/1101	348/E7.071
*	D	US-20030030652-A1	02-2003	Billmaier, James A.	H04N21/4438	725/135
*	E	US-20050235319-A1	10-2005	Carpenter, Kenneth F.	H04N21/4622	348/E5.103
*	F	US-20100085483-A1	04-2010	Pan; Yang	H04N21/4622	348/E5.103
*	G	US-20130002716-A1	01-2013	Walker; Todd	H04N21/47205	345/629
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☐ Claims renumbered in the same order as presented by applicant			☐ CPA		☑ T.D.		☐ R.1.47			
CLAIM		DATE								
Final	Original	10/17/2022								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
	9	✓								
	10	✓								
	11	✓								
	12	✓								
	13	✓								
	14	✓								
	15	✓								
	16	✓								
	17	✓								
	18	✓								
	19	✓								
	20	✓								
	21	✓								

Samsung
Ex. 1031 - Page 237

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

CPC - Searched*		
Symbol	Date	Examiner
H04N 21/(44016, 4782, 4316, 4622, 431)	10/17/2022	ALB

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
725	109	10/17/2022	ALB
715	717, 718	10/17/2022	ALB
345	629	10/17/2022	ALB

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Reviewed Prior Application(s) History/Cited Prior Art	10/17/2022	ALB
Inventor Name Search (PE2E)	10/17/2022	ALB
Recapture Review Conducted	10/17/2022	ALB
Litigation Search (07/26/2022)	10/17/2022	ALB
PE2E Text and Classification Search (see attached search history)	10/17/2022	ALB

Samsung
Ex. 1031 - Page 238

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

Samsung
Ex. 1031 - Page 239

PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L57	6465	725/109;715/717,718;345/629.ccls.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L58	28293	H04N21/44016,4782,4316,4622,431.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L59	21	("6130898" | "6240555" | "6351270" | "6501557" | "6606746" | "6727918" | "6760324" | "7124430" | "7340457" | "20020007493" | "20020088004" | "20020093594" | "20040064835" | "20040107437" | "20040221308").pn. OR ("8132220").urpn. AND (PGPB | USPT | USOC).dbnm.	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2022/10/17 01:12 PM
L60	408	725/109;715/717,718;345/629.ccls. AND interactive near2 television	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L61	22	725/109;715/717,718;345/629.ccls. AND interactive near2 television SAME overlay$5	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L62	6	725/109;715/717,718;345/629.ccls. AND interactive near2 television SAME overlay$5 SAME (condtion OR criterion OR tim$5)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L63	10	725/109;715/717,718;345/629.ccls. AND (event ADJ condition)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L64	2	725/109;715/717,718;345/629.ccls. AND (overlay ADJ activation)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L65	1	725/109;715/717,718;345/629.ccls. AND (overlay ADJ activation ADJ criterion)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L66	0	725/109;715/717,718;345/629.ccls. AND (event ADJ condition) SAME overlay	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L67	3691	H04N21/44016,4782,4316,4622,431.cpc. AND	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM

		interactive near2 television					
L68	299	H04N21/44016,4782,4316,4622,431.cpc. AND interactive near2 television SAME overlay$5	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L69	113	H04N21/44016,4782,4316,4622,431.cpc. AND interactive near2 television SAME overlay$5 SAME (condtion OR criterion OR tim$5)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L70	87	H04N21/44016,4782,4316,4622,431.cpc. AND (event ADJ condition)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L71	10	H04N21/44016,4782,4316,4622,431.cpc. AND (overlay ADJ activation)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L72	3	H04N21/44016,4782,4316,4622,431.cpc. AND (overlay ADJ activation ADJ criterion)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L73	6	H04N21/44016,4782,4316,4622,431.cpc. AND (event ADJ condition) SAME overlay	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L74	20	H04N21/44016,4782,4316,4622,431.cpc. AND interactive near2 television SAME overlay$5 SAME (condtion OR criterion OR tim$5) SAME (icon OR hyperlink)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L75	221	H04N21/44016,4782,4316,4622,431.cpc. AND interactive near2 television SAME overlay$5 AND remote SAME button$1	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L76	96	H04N21/44016,4782,4316,4622,431.cpc. AND interactive near2 television SAME overlay$5 AND remote SAME button$1 SAME (dedicat$5 OR color ADJ cod$4)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L77	2	H04N21/44016,4782,4316,4622,431.cpc. AND interactive near2 television SAME overlay$5 AND remote	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM

		SAME button$1 SAME (color ADJ cod$4)					
L78	3086	interactive near2 television SAME (broadcast AND internet)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L79	149	interactive near2 television SAME (broadcast AND internet) same2 overlay	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L80	0	interactive near2 television SAME (broadcast AND internet) same2 event ADJ condition	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L81	3086	interactive near2 television SAME (broadcast AND internet)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L82	1112	interactive near2 television SAME (broadcast AND internet) AND overlay	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L83	101	interactive near2 television SAME (broadcast AND internet) AND overlay SAME (trigger$1 OR condition$1 OR activation OR criterion)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L84	3	interactive near2 television SAME (broadcast AND internet) AND overlay SAME (trigger$1 OR condition$1 OR activation OR criterion) SAME (icon)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L85	124	television SAME (broadcast AND internet) AND overlay SAME (trigger$1 OR condition$1 OR activation OR criterion) SAME (icon)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L86	13463	television SAME overlay	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L87	1228	television SAME overlay SAME (event condition OR activation ADJ criterion)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L88	354	television SAME overlay near10 (event condition OR activation	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM

		ADJ criterion)					
L89	28	television SAME overlay near10 (event condition OR activation ADJ criterion) SAME (icon OR link OR timing)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L90	125	television SAME overlay near10 (event condition OR activation ADJ criterion) SAME (tim$3)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L91	12	television SAME overlay near10 (event condition OR activation ADJ criterion) SAME (start near2 tim$3)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L92	1	725/109;715/717,718;345/629.ccls. AND interactive near2 television SAME overlay$5 SAME (condition OR criterion)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L93	11	H04N21/44016,4782,4316,4622,431.cpc. AND interactive near2 television SAME overlay$5 SAME (condition OR criterion)	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L94	32355	interactive near4 television	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L95	11	interactive near4 television SAME overlay near3 condition	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L96	0	interactive near4 television SAME overlay near3 trigger$1	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L97	11	interactive near4 television SAME overlay near10 condition	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L98	183	interactive near4 television AND overlay near10 condition	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L99	144	interactive near4 television AND overlay near10 trigger	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L100	0	interactive near4 television AND overlay near10 trigger SAME condition	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L101	134	interactive near4 television AND overlay near10 condition SAME	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM

		tim$5					
L102	30	interactive near4 television AND overlay near10 trigger SAME tim$5	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L103	1	"9407969".pn.	(US-PGPUB; USPAT)	OR	ON	ON	2022/10/17 01:12 PM
L104	9	("6136898" | "6240555" | "6351270" | "6606746" | "7124430" | "7340457" | "7456902" | "20020007493" | "20040107437").pn. OR ("9407969").urpn. AND (PGPB | USPT | USOC).dbnm.	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2022/10/17 01:12 PM

PE2E SEARCH - Search History (Interference)

There are no Interference searches to show.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

BIB DATA SHEET

CONFIRMATION NO. 8539

SERIAL NUMBER	FILING or 371(c) DATE / RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
17/867,612	07/18/2022	725	3992	103692.0001US4re

APPLICANTS /ALB/
TVNGO LTD. (BVI), Amsterdam, NETHERLANDS, Assignee (with 37 CFR 1.172 Interest);

INVENTORS /ALB/
Yakkov MERLIN, Raanana, ISRAEL;

**** CONTINUING DATA **************************** /ALB/
This application is a REI of 13/336,189 12/23/2011 PAT 9407969
which is a CON of 11/794,825 07/06/2007 PAT 8132220
which is a 371 of PCT/IL2005/000035 01/11/2005

**** FOREIGN APPLICATIONS **************************** /ALB/

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
07/21/2022

Foreign Priority claimed	35 USC 119(a-d) conditions met	Verified and Acknowledged	Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☐ Yes ☑ No	☐ Yes ☑ No	/ADAM L BASEHOAR/ Examiner's Signature	☐ Initials	ISRAEL	7	21	2

ADDRESS /ALB/

FISH IP LAW, LLP
2603 Main Street
Suite 1000
Irvine, CA 92614
UNITED STATES

TITLE /ALB/

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

FILING FEE RECEIVED		
1720	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

BIB (Rev. 05/07).

THE UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

Appl No.:	**17/867,612 – Reissue of US 9,407,969**
Applicant:	**TVnGo Ltd. (BVI)**
Reissue Filing Date:	**July 18, 2022**
Art Unit:	**3992**
Examiner:	**Adam L. Basehoar**
Attorney Docket No.:	**103692.0001US4re**
Title	**FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION

Sir:

This paper responds to the Non-Final Office Action dated November 29, 2022. Applicant respectfully requests reconsideration in view of the amendments and/or remarks included herein. Please enter the amendments shown herein.

- Claim amendments begin on page 2.
- Amendments to the Specification begin on page 7.
- Remarks begin on page 11.

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Twice Amended) A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising:

(a) providing a combiner circuit at the user's premises, wherein:

the combiner circuit is coupled to a TV set and connected to a separate [TV timer box or] TV tuner in the TV set, at the user's premises, and

the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through [the]a TV tuner box or the TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored,

an image indicative of the content associated with said overlay-enabling digital data, and

an overlay activation criterion; and

(b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said overlay activation criterion is met, wherein generating [an] the overlay includes:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

2. (Original) The method according to claim 1, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user profile.

3. (Amended) The method according to claim 1, further including: receiving a command from [a] the user at said user premises; and responsive to said command, resizing said first portion and/or said second portion of said first display screen.

4. (Original) The method according to claim 1, wherein the content stored at said website enables streaming of digital data over the Internet; and

said method further including: pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

5. (Amended) The method according to claim 1, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein said generating [an] the overlay further includes within said first display said one or more second images.

6. (Original) The method according to claim 1, wherein the overlay-enabling digital data is supplementary or complementary to the video signals.

7. (Original) The method according to claim 1, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

8. (Original) The method according to claim 1, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

9. (Cancelled) The method according to claim 1, wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.

10. (Original) The method according to claim 5, further including:

periodically accessing a web server for downloading said overlay-enabling digital data;

Samsung
Ex. 1031 - Page 248

extracting from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieving and storing digital content from said web sites; and

if the overlay activation criterion is met and a user command that is associated with an image from amongst said one or more second images is identified, displaying the respective image from amongst the second images, accessing the respective web site associated with the displayed image and extracting and buffering content from the website.

11. (Original) The method according to claim 5, further comprising displaying a respective IP content when a corresponding one of said one or more second images is selected.

12. (Original) The method according to claim 7, including selecting specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

13. (Twice Amended) A TV-Internet Integration circuit for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the TV-Internet Integration circuit comprising:

a combiner circuit at [a] the user's premises coupled to a separate TV tuner box or TV tuner,

wherein the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the combiner circuit at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored;

an image indicative of the content associated with said overlay-enabling digital data; and

Samsung
Ex. 1031 - Page 249

an overlay activation criterion, wherein

the combiner circuit is responsive to [an]the overlay activation criterion being met for generating a corresponding overlay, including:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, and generate a second video display screen including at least a portion which corresponds to said content; and

a video output interface, coupled to or integrated within the combiner circuit and configured to be coupled to a video input of said TV set and to display said first display screen or said second video display screen.

14. (Original) The TV-Internet Integration circuit according to claim 13, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user-profile.

15. (Twice Amended) The TV-Internet Integration circuit according to claim 13, further including:

a command input for receiving a command from [a] the user at said user premises; and

a frame adjuster for resizing said first portion and/or said second portion of said first display screen in response to said command.

16. (Original) The TV-Internet Integration circuit according to claim 13, further including:

a receiver for receiving a digital data stream, wherein the stream of the digital data is enabled by the content stored at said website; and

a processing unit for pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

17. (Original) The TV-internet Integration circuit according to claim 13, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each

Samsung
Ex. 1031 - Page 250

of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and

wherein the combiner circuit is configured to:

periodically access a web server for downloading said overlay-enabling digital data;

extract from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieve and store digital content from said web sites; and

if the overlay activation criterion is met, and a user command that is associated with an image from amongst said one or more second images is identified, display the respective image from amongst the second images, access the respective web site associated with the displayed image and extract and buffer content from the website.

18. (Original) The TV-Internet Integration circuit according to claim 13, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

19. (Original) The TV-Internet Integration circuit according to claim 13, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

20. (Cancelled) The TV-Internet Integration circuit according to claim 13, wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.

21. (Original) The TV-Internet Integration circuit according to claim 18, wherein the icon is colored so as to allow user selection of a specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at col. 3 ll. 39-64 as indicated below with marked and clean copies.

---Marked---

FIG. 1 is pictorial representation showing a mixed broadcast network 10 having a Cable TV Box 11 coupled to a satellite 12 and a Cable TV transmitter 13 for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server 14 via the Internet 15 (constituting a digital data communications network) to a TV-Internet Integration Box 16 (e.g., including a circuit, processor, etc.) for display on a TV set 17 coupled thereto. The TV set 17 may be constituted by a computer having a video card and a high resolution display monitor. However, the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box 16 is connected to the Cable TV Box 11 for combining the broadcast TV signals received by the Cable TV Box 11 with the IP packet data broadcast via the Internet 15. Also shown is an advertiser 18 having a computer coupled to the Internet 15 for downloading advertising content to the web server 14 for storage in a database 19 and a telephone 20 coupled to the TV-Internet Integration Box 16 for feeding telephony signals to the TV-Internet Integration Box 16, which combines the received telephony signals with video data received from the Cable TV Box 11 and/or the Internet 15.

---Clean---

FIG. 1 is pictorial representation showing a mixed broadcast network 10 having a Cable TV Box 11 coupled to a satellite 12 and a Cable TV transmitter 13 for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server 14 via the Internet 15 (constituting a digital data communications network) to a TV-Internet Integration Box 16 (e.g., including a

circuit, processor, etc.) for display on a TV set 17 coupled thereto. The TV set 17 may be constituted by a computer having a video card and a high resolution display monitor. However, the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box 16 is connected to the Cable TV Box 11 for combining the broadcast TV signals received by the Cable TV Box 11 with the IP packet data broadcast via the Internet 15. Also shown is an advertiser 18 having a computer coupled to the Internet 15 for downloading advertising content to the web server 14 for storage in a database 19 and a telephone 20 coupled to the TV-Internet Integration Box 16 for feeding telephony signals to the TV-Internet Integration Box 16, which combines the received telephony signals with video data received from the Cable TV Box 11 and/or the Internet 15.

Please replace the paragraph at col. 4, ln 36-49 as indicated below with marked and clean copies.

---Marked---

To this end, the subscriber is able to program the TV-Internet Integration Box 16 in much the same way that a video cassette recorder is programmed so as to store in the memory [25]26 a timetable indicating what type of IP data is to be displayed and when. The timetable is updated as and when required by the subscriber. The TV-Internet Integration Box 16 is adapted to check the timetable periodically and to filter out incoming IP content that is either of a type that is not required or that is broadcast during an unauthorized time window. By such means, an additional layer of authorization may be provided to that stored in the database 19 for access by the web server 14, thus allowing pre-fetching of IP content and storage in the memory [25]26 of the TV-Internet Integration Box 16.

---Clean---

To this end, the subscriber is able to program the TV-Internet Integration Box 16 in much the same way that a video cassette recorder is programmed so as to store in the memory 26 a timetable indicating what type of IP data is to be displayed and when. The timetable is updated

Samsung
Ex. 1031 - Page 253

as and when required by the subscriber. The TV-Internet Integration Box 16 is adapted to check the timetable periodically and to filter out incoming IP content that is either of a type that is not required or that is broadcast during an unauthorized time window. By such means, an additional layer of authorization may be provided to that stored in the database 19 for access by the web server 14, thus allowing pre-fetching of IP content and storage in the memory 26 of the TV-Internet Integration Box 16.

Please replace the paragraph at col. 6 ll. 48-67 as indicated below with marked and clean copies.

---Marked---

FIG. 5 is a block diagram showing the functionality of the TV-Internet Integration Box 16 shown in FIG. 1. Thus, the TV-Internet Integration Box 16 comprises a first input 21 for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input 22 for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with predefined user-profiles associated with IP packet data and stored in the database 19. A combiner unit 23 (e.g., including a circuit, processor, etc.) is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output 24 is coupled to the combiner unit 23 for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

---Clean---

FIG. 5 is a block diagram showing the functionality of the TV-Internet Integration Box 16 shown in FIG. 1. Thus, the TV-Internet Integration Box 16 comprises a first input 21 for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input 22 for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with

predefined user-profiles associated with IP packet data and stored in the database 19. A combiner unit 23 (e.g., including a circuit, processor, etc.) is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output 24 is coupled to the combiner unit 23 for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

Samsung
Ex. 1031 - Page 255

REMARKS/ARGUMENTS

The Non-Final Office action mailed by the Office on or about November 29, 2022 ("2022 November OA") has been received and carefully considered. After entry of this response, claims 1-8, 10-19 and 21 remain pending. Claims 9 and 20 will be cancelled claims.

Notice of Related Litigation and Request for Expedited "Special" Handling

Patent US 9,407,969 ("the '969 Patent") was the subject of litigation in the District of New Jersey as well as an appeal to the Federal Circuit. Orders from both courts rendered claims 1, 9, 10, 13, 17, and 20 of the '969 Patent invalid as indefinite. The District of New Jersey matter is Civil No. 18-10238 (RMB/KMW). The Federal Circuit matter is Case 20-1837. Pursuant to MPEP 1442, Applicant respectfully requests this matter be taken up for action in advance of other reissue applications.

Examiner's Interview

The Applicant's representative, Tomás A. Prieto, and Examiner Adam L Basehoar, held a telephonic interview on May 23, 2023 (2023 May Interview) to discuss this application as well as pending reissue application 17/714,917 ("'917 Reissue Application"). During the interview the parties discussed the rejections under 35 USC 251 and 35 USC 112, 2nd paragraph. The parties also briefly discussed the *ex parte Adams* PTAB decision cited in the Office Action in the '917 reissue application. Examiner Basehoar provided additional insight into his rationale in issuing the rejection in view of the prior litigation of the applications and the cited PTAB decision. No agreements were reached.

Applicant wishes to thank Examiner Basehoar for granting the interview and for his consideration in providing additional information and insights.

Amended Claims (Claims 1, 3, 5, 9, 10, 13, 15, 17, and 20)

Claims 1, 3, 5, 13, and 15 are amended to address any apparent defects as to antecedent basis, at least in part. Applicant submits that such amendments cure any defects as to antecedent basis that may exist, and otherwise requests allowance. No new matter has been added.

Claim 1 is further amended to remove the term "TV timer box", which is not literally described in the Specification. The removal of an alternative limitation does not broaden the scope of this limitation. Applicant submits no new matter is added.

Cancelled Claims (Claims 9 and 20)

Pursuant to MPEP 1453(II), a claim to be cancelled should be cancelled by a direction to cancel the claims. As such:

Please cancel claims 9 and 20.

Specification Amendments

The paragraphs at col. 3 ll. 39-64 and col. 6 ll. 48-67 are amended as enclosed herein. Claims 1, 13, and 17 include the term "combiner circuit" while claims 13-21 include the term "TV-Internet Integration circuit", each of which is not literally described in the Specification. However, as the combiner unit and TV-Internet Integration unit described in the Specification receive, interpret, manipulate, and provide digital audio and video data, a PHOSITA would understand such units as including hardware known at the time for performing such tasks, for example circuits and processors. Applicant thus amends the Specification as submitted herein to add the parenthetical that the combiner unit and TV-Internet Integration unit include processors, circuits, etc. No new matter is added.

The paragraphs at col 4, ln 36-49 have been amended to address an objection to the specification raised in the 2022 November OA. The numbering of the recited memory has been changed to "memory 26" instead of the previously-recited "memory 25". No new matter has been added.

Objections to the Specification

The disclosure was objected to because of the recitation of the "memory 25" in reference to Fig. 5, but Fig. 5 shows that reference number 25 refers to the "processing unit" and number 26 is the "memory". (2023 November OA, page 4)

Samsung
Ex. 1031 - Page 257

In response, the specification has been amended to recite "memory 26", thus rendering the objection moot. Applicant respectfully requests withdrawal of the objection to the specification.

35 USC § 251

Claims 1-21 have been rejected under 35 USC 251 as being broadened in a reissue application filed outside the two-year statutory period. Applicant respectfully disagrees. In support, Applicant notes the following:

The Office Action first indicates that the prior deletion of the limitations "overlay activation criterion" broadens the claims. (2022 November OA, page 4). In this response, claim 1 is only amended as discussed above, and does not delete the "overlay activation criterion". Thus, this particular point is now moot.

The Office Action indicates that because the original claims 1 and 13 "present irreconcilable inconsistencies that render their precise meaning not reasonably certain", it would be difficult to see how the claims could "be compared to a product or process said to infringe the claims." (2022 November OA, page 5). Using the figures of the '969 patent as an example, the Examiner asserted that the drawings could be read into the amended claims. However, because of the inconsistencies in the original claims 1 and 13, the same figures of the '969 patent could not be read into the original claims 1 and 13. Therefore, the Examiner explains that:

> [Figs. 1-8] of the Merlin '969 patent-if prior art-would anticipate or if used without Applicant's permission would infringe amended independent claims 1 and 13, but would not anticipate or infringe independent claims 1 and 13 of the Merlin '969 patent. It necessarily follows that amended independent claims 1 and 13 enlarge the scope of claims 1 and 13 of the Merlin '969 patent, all contrary to 35 U.S.C. 251(d). (2022 November OA, page 5)

This quoted section is a near-verbatim recitation of a section on page 11 of *Ex parte Adams*. Though *Ex parte Adams* (Appeal 2007-0441 (March 14, 2007)) was not asserted in the 2022 November OA, it was cited in the '917 Reissue Application to the same applicant and was discussed as relevant to both this application and the other application for the same reasons during the 2023 May Interview. Thus, Applicant deems it necessary to discuss it here as well in the interest of advancing the application. Based on the assertion of *Ex parte Adams* (in

particular, pages 10-11) in the other pending reissue application and the subsequent conversation with Examiner Basehoar during the 2023 May Interview, it is Applicant's understanding that the crux of this rejection is as follows:

> An indefinite claim contains no scope, and therefore cannot be infringed by any product or process. Amending a previously indefinite claim to make it definite, no matter the amendment, broadens the claim according to the test described by the Examiner because no product or process can infringe the indefinite claim but there could be a product or process that infringes a definite claim.

Applicant respectfully disagrees, especially in view of the currently-presented claims.

Applicant first notes that the *Ex parte Adams* is an informative decision, not precedential. Based on the 2023 May Interview, Applicant understands why the Examiner cited it in the '917 Reissue Application and why the Examiner feels it would be similarly applicable here. However, Applicant notes that because *Ex parte Adams* is merely informative, the Examiner has the latitude to disagree with the decision itself as well as the applicability of the decision to the particular issues of this application.

In *Ex parte Adams*, the PTAB set forth the reasoning discussed above: that an indefinite claim has **no scope** and thus, no product or process could possibly infringe. Thus, amendments to an indefinite claim that made the claim definite would result in claims that then could be infringed. As such, no matter the amendments, amending a previously-indefinite claim to make it indefinite would automatically broaden the scope claim. (see *Adams*, page 11) If strictly adhered to, the implication of *Ex parte Adams* is that any ambiguity or confusion that gave rise to indefiniteness would be fatal for the purposes of reissue.

However, the courts have allowed for amendments to indefinite claims during reissue, especially when the substantive scope of the claim is not meaningfully changed.

In *Slimfold Mfg. Co v Kinkead Props.* 626 F.Supp 493 (1956), correcting an antecedent basis issue during reissue does not meaningfully change the scope of the claim. (*Slimfold* at 497-498). *Slimfold* cites to *In re Altempohl,* 500 F.2d 1151 (Fed. Cir. 1974), which states that "[l]ack of antecedent basis in a claim could render it invalid under 35 USC 112, second paragraph, and

correction of such a defect by reissue should not have to depend on difference in scope of the claim." (*Altempohl* at 1156). These holdings show that courts have ruled on the possibility of using reissue to correct issues that could give rise to indefiniteness. Moreover, the indication that correcting these issues does not meaningfully change the scope of the claim logically dictates that the flawed claims being amended must have a scope such that the amended claims have a substantially similar scope.

As stated by the court in *Altempohl*, "[i]n as much as 35 USC 251 is a remedial provision, which should be liberally construed, a patentee should be allowed to correct an error or ambiguity in a claim without having to rely on implication or litigation." (*Altempohl* at 1156-1157). To effectively render any indefiniteness issue unrecoverable as in *Ex parte Adams* would run counter to the court-recognized remedial nature of the reissue process.

When a claim in reissue is identical to a claim in the original patent, then a product or process infringing the reissue claim necessarily infringes the claim of the original patent. *General Plastic Corp. v Finkelstein*, 145 F.Supp 862, 863-864 (1956). Claims 1 and 13 presented via this response have been amended to correct potential antecedent basis issues and for consistency in terminology. None of these amendments broaden the scope of the claim.

As it pertains to the limitations that recite "overlay activation criterion", the claims remain identical to those of the original '969 patent. Therefore, for the purposes of the claim language giving rise to the district court's determination of an inconsistency between claims 1 and 9 (and 13 and 20) of the '969 patent and ultimately a conclusion of indefiniteness of claim 1 of the '969 patent, claims 1 and 13 are identical to those of the '969 patent.

Because the scope of claims 1 and 13 presented in this response is at least identical, if not slightly narrower than, the scope of the corresponding claims of the '969 patent, the current claims cannot logically be considered to broaden the scope of the claims and as such 35 USC 251(d) does not apply.

Claims 9 and 20, which combined with claims 1 and 13, respectively gave rise to the conclusions of indefiniteness by the district court, have been cancelled. Cancelling a claim

cannot constitute broadening a claim because there is no way for a cancelled claim to be infringed.

Claims 1-21 have been rejected under 35 USC 251 "as being an improper recapture of broadened claimed subject matter…" because of the prior deletion of the limitations reading "overlay activation criterion." (2022 November OA, pages 6-9) In this response, this limitation is no longer deleted, rendering this rejection under 35 USC 251 moot.

Claims 1-21 have been rejected under 35 USC 251 as being based on a defective Reissue Declaration (2022 November OA, pages 9-11). Applicant respectfully disagrees. In support, Applicant notes the following:

As per the first point on pages 9-10 of the 2022 November OA, whereby the wrong box in form PTO/AIA/06. Concurrent with this response, a corrected Reissue Application Declaration has been submitted, thus rendering this point moot

In the second point raised on pages 10-11 of the 2022 November OA, the Applicant notes the following:

With regard to errors that the Examiner asserts are related to broadening the claims after two years, it is Applicant's position that the scope of the claims has not been broadened for the reasons discussed above.

With regard to the Examiner's assertion that the third-sixth errors are not specific because the state that the claims "may be invalid", Applicant respectfully disagrees that this contradicts the language of the declaration. The first and second errors are consistent with the declaration. The third-sixth errors are those that may also be invalid in addition to the first and second error. Additionally, the fifth and sixth errors have now been removed, rendering the points regarding the fifth and sixth errors moot.

In the third point raised on page 11 of the 2022 November OA, the Examiner notes that the Reissue Declaration fails to identify a claim that the application seeks to broaden. As noted above, it is Applicant's position that the claim amendments presented here do not broaden the scope of the claims at all.

Samsung
Ex. 1031 - Page 261

For the reasons discussed above, Applicant respectfully requests withdrawal of the rejections under 35 USC 251.

35 USC § 112, 2nd Paragraph

Claim 1 has been rejected under 35 USC §112, 2nd paragraph for lacking antecedent basis for the recitation of "the TV tuner box" of line 8. Claim 1 has been amended to recite "a TV tuner box or the TV tuner in the TV set", thus rendering the rejection moot.

Claims 1 and 13 have been rejected under 35 USC §112, 2nd paragraph because of the recitation of "event condition". The current claims no longer recite "event condition" and instead recite the original "overlay activation criterion", thus rendering the rejection moot.

Applicant notes that the 2022 November OA does not contain a rejection that mirrors the holding of invalidity of the claims at the District Court level (Civil No. 18-10238 (RMB/KMW), Opinion (April 16, 2020)) ("the District Court Decision") and affirmed by the CAFC (*TVnGo Ltd v LG Elecs.* U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021)) ("the CAFC Decision"), presumably because the preliminary amendment did not render the claims indefinite (other rejections notwithstanding). As the independent claims have been amended to be substantially identical to the claims of the '969 patent, Applicant anticipates that the Office may issue this rejection following this response (likely similar to the rejection in the current Office Action in the '917 Reissue Application). To that end, Applicant offers the following comments:

The District Court Decision identifies an inconsistency between the recitation of "overlay activation criterion" in independent claims 1 and 13 and their respective dependent claims 9 and 20. Thus, the inconsistency is not in claims 1 and 13 alone, but rather in claim 1 when interpreted in combination with claim 9 and in claim 13 when interpreted in combination with claim 20. The inconsistency arises in that in claims 1 and 13, the "overlay activation criterion" is provided "over the Internet" whereas claims 9 and 20 state that the "user command information" may be a component of the "overlay activation criterion" and when the limitation of "user command information" is read in the context of the specification, the "user command information is "provided at the user's premises and not over the Internet."

In response, Applicants have now cancelled claims 9 and 20, such that there is no link between the "user command information" and the "overlay activation criterion", thus resolving the ambiguity because the "overlay activation criterion" is no longer claimed to be originated "not from the Internet." Thus, one of ordinary skill in the art would be appraised of the metes and bounds of the claim.

As to the dependent claims 9 and 20 specifically, the CAFC Decision states at page 11:

> Further, merely dismissing the dependent claims as invalid, as TVnGo proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in "[o]ther claims of the patent in question," which "can also be valuable sources of enlightenment as to the meaning of a claim term." Phillips, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are invalid does not change that.

In this section, the CAFC is not indicating that the dependent claims must stay as they are and can never be amended or cancelled to remove the recitation of "overlay activation criterion." Rather, in this section the CAFC is responding to the possibility that the dependent claims be held invalid does not remedy the inconsistency issue. This is because as long as the recitation of "overlay activation criterion" remains in claims 9 and 20, the inconsistency with respective claims 1 and 13 continues to exist and as such the independent claims 1 and 13 will also be indefinite. In other words, even if the dependent claims are invalid with valid independent claims, the invalid dependent claims still remain as a part of the patent document and as such would be a source of inconsistency to the skilled artisan.

However, by cancelling claims 9 and 20, the link between the "overlay activation criterion" and the "user command information" is broken. A reissue patent without those claims would no longer have a source of confusion/inconsistency for the skilled artisan. Instead, the skilled artisan would only discover the meaning of "overlay activation criterion" as coming "from the Internet" of independent claims 1 and 13. The sections of the specification cited in the District Court Decision as related to the "user command information" would not raise the inconsistency either as there is nothing in these sections of the specification that would lead to

the skilled artisan to interpret it as being related to the "overlay activation criterion." The remaining dependent claims that recite "overlay activation criterion" are consistent with this interpretation.

For the reasons discussed above, it is Applicant's position that the claims are definite. As such, Applicant respectfully requests withdrawal of the rejections under 35 USC 112, 2nd paragraph.

Request For Allowance

In view of the remarks presented above, the Applicant respectfully requests allowance of all pending claims.

Respectfully submitted,
Fish IP Law, LLP

Date: May 30, 2023

By: /Tomas A. Prieto/
Tomas A. Prieto
Reg. No. 60,675

Fish IP Law, LLP
19900 MacArthur Blvd., Suite 810
Irvine, CA 92612
Telephone (949) 943-8300
Fax (949) 943-8358

PTO/AIA/08 (09-20)
Approved for use through 09/31/2023. OMB 0651-0033
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUPPLEMENTAL
REISSUE APPLICATION DECLARATION BY THE ASSIGNEE

Docket Number (optional): 103692.0001US4re

I hereby declare that:

The residence and mailing address of the inventor or joint inventors are stated below.

Name of the Assignee:

TVnGo Ltd. (BVI)

I am authorized to act on behalf of the assignee (if the assignee is a juristic entity).

The entire title to the patent identified below is vested in said assignee, or if there are multiple assignees/owners, all assignees/owners have executed a Reissue Application Declaration to account for the entire title of the patent identified below.

Inventor: Yakkov Merlin

Residence: City	State	Country
Raanana	-	Israel

Mailing Address:
9 Haeshel St

City	State	Zip	Country
Raanana	-	43585	Israel

☐ Additional inventors are named on separately numbered sheets attached hereto.

Patent Number: US 9,407,969 Patent Issue Date: August 2, 2016

I believe said inventor(s) to be the original inventor or original joint inventors of the subject matter which is described and claimed in said patent, for which a reissue patent is sought on the invention titled:

Forming Overlays At User's Premises And Utilizing Them For Selective Combinations Of Tv Broadcast Channel Format Material And Ip-Format Material

the specification of which

☑ is attached hereto.

☐ was filed on _____ as reissue application number _____.

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

I believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below.
(Check all boxes that apply.)

☐ by reason of a defective specification or drawing.

☑ by reason of the patentee claiming more or less than he had the right to claim in the patent.

☐ by reason of other errors.

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-0033. Public burden for this form is estimated to average 12 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

REISSUE APPLICATION DECLARATION BY THE ASSIGNEE	Docket Number (Optional) 180592.0001USAre

At least one error upon which reissue is based is described below. If the reissue is a broadening reissue, a claim that the application seeks to broaden must be identified and the box below must be checked:

See attached.

(Attach additional sheets, if needed.)

☐ **The application for the original patent was filed under 37 CFR 1.46 by the assignee of the entire interest.**

I hereby appoint:

☑ Practitioners associated with Customer Number: 24392

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Correspondence Address: Direct all communications about the application to:

☑ The address associated with Customer Number: 24392

OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

Signature	Date (Optional)
Legal name of person signing: Eliot Harary	
Address of Assignee: 912 1st Court, Brooklyn, NY 11223	

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

Appl No.:	**TBD – Reissue of US9,407,969**
Applicant:	**TVnGo Ltd. (BVI)**
Filing Date:	**December 23, 2011**
Art Unit:	**3992**
Examiner:	**Adam L. Basehoar**
Attorney Docket No.:	**103692.0001US4re**
Title	**Forming Overlays At User's Premises And Utilizing Them For Selective Combinations Of Tv Broadcast Channel Format Material And Ip-Format Material**

ATTACHMENT TO PTO/AIA/06 (09-20) // ERROR UPON WHICH REISSUE IS BASED

One error is a federal court found claims 1, 9, 10, 13, 17, and 20 invalid because the claim term "overlay activation criterion" was not literally described in the Specification and is otherwise indefinite.

A second error is the same court found claims 9 and 20 further invalid as inconsistent with parent claims 1 and 13, respectively, because claims 1 and 13 required information be provided via Internet, while dependent claims required the same information may be provided locally without the Internet.

A third error is claims 1, 3, 5, 13, and 15 have apparent antecedent basis defects and may be invalid.

A fourth error is claim 1 includes the term "TV timer box" which is not literally described in the Specification and may be invalid.

Electronic Patent Application Fee Transmittal

Application Number:	17867612
Filing Date:	18-Jul-2022
Title of Invention:	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL
First Named Inventor/Applicant Name:	Yakkov MERLIN
Filer:	Tomas Prieto/Tammy Lightman
Attorney Docket Number:	103692.0001US4re

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 3 months with $0 paid	2253	1	592	592
Miscellaneous:				
			Total in USD ($)	**592**

Electronic Acknowledgement Receipt

EFS ID:	48075442
Application Number:	17867612
International Application Number:	
Confirmation Number:	8539
Title of Invention:	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL
First Named Inventor/Applicant Name:	Yakkov MERLIN
Customer Number:	24392
Filer:	Tomas Prieto/Tammy Lightman
Filer Authorized By:	Tomas Prieto
Attorney Docket Number:	103692.0001US4re
Receipt Date:	30-MAY-2023
Filing Date:	18-JUL-2022
Time Stamp:	18:11:52
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$592
RAM confirmation Number	E20235TI12515128
Deposit Account	500341
Authorized User	Tammy Lightman

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Response-2023-05-30-vers-01g-FILED.pdf	97994 d5ec30fceba7201806fdf699a1c36c72a2229897	yes	19
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Amendment/Request for Reconsideration-After Non-Final Rejection		1	1	
	Claims		2	6	
	Specification		7	10	
	Applicant Arguments/Remarks Made in an Amendment		11	19	
Warnings:					
Information:					
2	Reissue Oath or Declaration	Declaration-Supplemental-AIA06-with-Attachment-FILED.pdf	2014105 d858e774b3c998796284fa878c5163cf89821b8f	no	4
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	38837 6ce262abaa94666445a15a3822be6f884030bf9d	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2150936		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 05/31/2023

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
05/31/2023	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com
rfish@fishiplaw.com

Applicant-Initiated Interview Summary	**Application No.** 17/867,612	**Applicant(s)** MERLIN, Yakkov		
	Examiner Adam L Basehoar	**Art Unit** 3992	**AIA (First Inventor to File) Status** No	**Page** 1 of 2

All Participants (applicant, applicants representative, PTO personnel)	**Title**	**Type**
Adam L Basehoar	Primary Examiner	Telephonic
Alex Kosowski	SPE	
Dennis Bonshock	Primary Examiner	
Tomas Prieto	Agent of Record	

Date of Interview: 23 May 2023

Issues Discussed:

35 U.S.C. 112

Via the related and substantially similar reissue application 17/714,917, the 35 U.S.C. 112, second paragraph, rejection was generally discussed in light of Applicant's amendment to the independent and dependent claims, the disclosure of the Merlin '969 patent, and binding/controlling determinations made by a District Court and the CAFC regarding the claims and claim language (e.g., "overlay activation criterion") of the Merlin '969 patent. No specific agreement was reached.

Other

Via the related and substantially similar reissue application 17/714,917, the Examiner further explained the rationale behind the broadening rejection under 35 U.S.C. 251 in light of the general intent of Applicant's amendment to the independent and dependent claims, MPEP 1412.03(I), an informative decision by the PTAB, and binding/controlling determinations made by a District Court and the CAFC regarding the claims and claim language (e.g., "overlay activation criterion") of the Merlin '969 patent. No specific agreement was reached. The Examiner noted that because the instant reissue application was filed more than two years after the Merlin '969 patent issued, there did not appear to be a proper mechanism to overcome both the 35 U.S.C. 251 and the 35 U.S.C. 112, second paragraph, rejections.

/ADAM L BASEHOAR/ Primary Examiner, Art Unit 3992	/A.J.K/ Supervisory Patent Examiner, Art Unit 3992

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04
Please further see:
MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 07/31/2023

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER	
BASEHOAR, ADAM L	

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
07/31/2023	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com
rfish@fishiplaw.com

Office Action Summary	Application No. 17/867,612	Applicant(s) MERLIN, Yakkov	
	Examiner Adam L Basehoar	Art Unit 3992	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 30 May 2023.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☑ This action is **FINAL.** 2b) ☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-8,10-19 and 21 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 1-8,10-19 and 21 is/are rejected.

8) ☑ Claim(s) 9 and 20 is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☑ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

2. For reissue applications filed on or after September 16, 2012, all references to 35 U.S.C. 251 and 37 CFR 1.172, 1.175, and 3.73 are to the current provisions.

DETAILED ACTION

3. This is a Final Action responsive to communications: Applicant's Response filed on 05/30/2023. Applicant's Response includes an Amendment to the Specification, an Amendment to the Claims, a new Reissue Declaration, and Remarks. Applicant's Response has been entered and made of record.

4. In light of the Amendment to the Claims, claims 1 and 13 have been further amended, claims 9 and 20 have been canceled, and claims 10 and 17 have been amended to revert to their original form in the Merlin '969 patent. Therefore, claims 1-8, 10-19, and 21 are currently pending in the application. Claims 1 and 13 are independent claims.

5. The objection to the disclosure (see: Non-Final Action, p. 4) has been withdrawn as necessitated by the Amendment to the Specification. As noted below, the Amendment to the Specification introduces new issues that must be corrected.

6. The rejection of claims 1-21 under 35 U.S.C. 251 as being broadened in a reissue application filed outside the two year statutory period (see: Non-Final Action, pp. 4-5) has been withdrawn as necessitated by the Amendment to the Claims. However, as noted below, a different rejection of claims 1-8, 10-19, and 21 under 35 U.S.C. 251 has been made in light of the Amendment to the Claims.

7. The rejection of claims 1-21 under 35 U.S.C. 251 as being an improper recapture (see: Non-Final Action, pp. 6-9) has been withdrawn as necessitated by the Amendment to the Claims.

8. The Examiner notes that the first and second defects (see: Non-Final Action, pp. 9-11) identified in the Reissue Declaration have been overcome by the filing of the new Reissue Declaration. Specifically, at least the second error identified in the new Reissue Declaration constitutes at least one proper error upon which the instant reissue application is based. The second error is no longer related to broadening the claims after two years and/or the recapture of surrendered subject matter, and is merely related to canceling indefinite claims. As noted in MPEP 1414(II), "Where applicant specifies one such error, this requirement of a reissue oath/declaration is satisfied...Where more than one error is specified in the oath/declaration and some of the designated 'errors' are found to not be 'errors' under 35 U.S.C. 251, any remaining error which is an error under 35 U.S.C. 251 will still support the reissue."

9. The rejection of claims 1-21 under 35 U.S.C. 112 (pre-AIA), second paragraph (see: Non-Final Action, pp. 11-12), has been withdrawn as necessitated by the Amendment to the Claims. However, as noted below, a different rejection of claims 1-8, 10-19, and 21 under 35

U.S.C. 112 (pre-AIA), second paragraph, has been made in light of the Amendment to the Claims.

Reissue

10. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 9,407,969 B2 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

11. The patent sought to be reissued by this application has been involved in litigation. Any documents and/or materials which would be material to the patentability of this reissue application are required to be made of record in reply to this action.

12. Applicant is notified that any subsequent amendment to the specification and/or claims must comply with 37 CFR 1.173(b).

Claim Objections

13. Newly canceled dependent claims 9 and 20 are objected to for failing to comply with 37 CFR 1.173(b)(2). 37 CFR 1.173(b)(2) at least requires, "except that a patent claim or added claim should be canceled by a statement canceling the claim without presentation of the text of the claim." Newly canceled dependent claims 9 and 20 each improperly present the text of the canceled claim (e.g., see: MPEP 1453(II)(C) and 1453(V)(B)).

Appropriate correction is required.

Specification

14. The Amendment to the Specification is objected to for failing to comply with 37 CFR 1.173(b)(1). 37 CFR 1.173(b)(1) at least requires, "Changes to the specification, other than the claims...must be made by submission of the entire text of an added or rewritten paragraph, including markings pursuant to paragraph (d) of this section...The precise point in the specification where any added or rewritten paragraph is located must be identified" (emphasis added). The Examiner notes that Applicant requests to "Please replace the paragraph at column 4, ln 36-39 as indicated below with the marked and clean copies." However, that specific section indicated and submitted by Applicant is not a singular paragraph, and thus does not include the entire text of the rewritten paragraph. The full paragraph referenced by Applicant spans lines 27-57 in column 4 of the Merlin '969 patent.

Appropriate correction is required.

15. The Amendment to the Specification is also objected to under 35 U.S.C. 251 because it introduces new matter into the disclosure of the patent for which reissue is sought. 35

U.S.C. 251 states that no new matter shall be introduced into the application for reissue. The added material which is not supported by the prior patent is as follows:

In the replacement paragraph of column 6, lines 48-67 the "combiner unit 23" is amended to include hardware in the form of "a circuit, processor, etc." While the disclosure of the Merlin '969 patent has proper support for the "combiner unit 23" to include a "circuit", it does not have proper support for the "combiner unit 23" to include a processor. At best, the "combiner unit 23" is coupled to a processing unit 25 (e.g., Fig. 5) or may be implemented in software by the processing unit 25, but it does not necessarily include a processor.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 251

16. **Claims 1-8, 10-19, and 21 are rejected** under 35 U.S.C. 251 as being broadened in a reissue application filed outside the two year statutory period. A claim is broader in scope than the original claims if it contains within its scope any conceivable product or process which would not have infringed the original patent. A claim would be considered a broadening claim if the Patent Owner would be able to sue any party for infringement who previously could not have been sued for infringement. A claim is broadened if it is broader in any one respect even though it may be narrower in other respects.

At least amended independent claim 1 of the Merlin '969 patent has been broadened by the deletion of a separate "TV timer box" and the addition of only "a TV tuner box." Original independent claim 1 required a (1) "separate TV timer box" or "TV tuner in the TV set" and (2) "the TV tuner box" or "TV tuner in the TV set." Amended independent claim 1 now includes within its scope "a separate TV tuner in the TV set" and "a TV tuner box" that is not separate.

The Examiner generally agrees with Applicant (see: Remarks, p. 12) that the removal of an alternative limitation does not broaden the scope of a claim. However, in this instance Applicant has not merely removed an alternative limitation.

To correct this issue the Examiner suggests that Applicant simply change the original "a separate TV timer box" to read "a separate TV [timer] tuner box." The inclusion of a "timer box" was clearly a typographical error (it is the proper antecedent to "the TV tuner box") and its spelling correction would not be considered broadening. Additionally, this correction would clear up the current claim language which now states "a separate TV tuner in the TV set." It is unclear how the TV tuner is "separate" when it is contained in the TV set.

17. **Claims 1-8, 10-19, and 21 are rejected under 35 U.S.C. 251** as being improperly broadened in a reissue application made and sworn to by the assignee. The application for reissue may be made and sworn to by the assignee of the entire interest only if the application does not seek to enlarge the scope of the claims of the original patent or, for reissue applications filed on or after September 16, 2012, the application for the original patent was filed by the assignee of the entire interest under 37 CFR 1.46.

As noted above, independent claim 1 of the Merlin '969 patent has clearly been broadened by the Amendment to the Claims.

18. The new Reissue Declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

The new Reissue Declaration fails to identify an original patent claim that the application seeks to broaden (see: MPEP 1414(II)(B) and 37 CFR 1.175(b)). For an application filed on or

after September 16, 2012 that seeks to enlarge the scope of the claims of the patent, the reissue oath or declaration must also identify a claim that the application seeks to broaden. The Examiner acknowledges that it does not appear to be Applicant's intent to broaden the claims (e.g., see: Remarks, p. 16). As noted above, Applicant is currently outside the two year statutory period and thus cannot broaden the claims. However, because the claims have indeed been broadened by the Amendment to the Claims, the new Reissue Declaration is required to conform with 37 CFR 1.175(b).

Appropriate correction is required.

19. **Claims 1-8, 10-19, and 21 are rejected** as being based upon a defective Reissue Declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the Declaration is set forth in the discussion above in this Office action.

Claim Rejections - 35 USC § 112

20. The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

21. **Claims 1-8, 10-19, and 21 are rejected** under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

As acknowledged by Applicant (see: Remarks, p. 15), amended independent claims 1 and 13 at least maintain the identical scope as their corresponding claims in the Merlin '969 patent.

Therefore, amended independent claims 1 and 13 each still recite, "wherein said overly-enabling digital data includes…an overlay activation criterion" (emphasis added).

With regards to the use of the term "overlay activation criterion", the Examiner notes that the District Court (see: Civil No. 18-10238 (RMB/KMW), Opinion (April 16, 2020)) determined that the term "'overlay activation criterion'…neither of which are terms of art, nor defined by the specifications" is used in a manner "that is inconsistent with the use of that same term in dependent claims 9 and 20, and the specifications of both patents." Additionally, the District Court determined that "the intrinsic evidence presents a POSA with irreconcilably inconsistent information…that 'overlay activation criterion' comes from the Internet and simultaneously not from the Internet…Because the Court cannot construe the claims, they are indefinite." Similarly, the CAFC (see: *TVnGO Ltd. v. LG Elecs.* U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021)) highlighted the fact that there was a lack of intrinsic evidence as to the meaning of the term "overlay activation criterion" and pointed out that the term was not "mentioned, let alone defined, in the shared specification…And the 'limited information' provided by the prosecution history isn't enough to provide certainty." Additionally, the CAFC also determined "one of ordinary skill would lack reasonably certainty as to the source of an 'overlay activation criterion'… the intra-patent grounds discussed above are sufficient to establish indefiniteness…The district court correctly concluded that the asserted claims are invalid for indefiniteness."

Thus, amended independent claims 1 and 13 are indefinite for at least the same reasons (i.e., fail to inform a person of ordinary skill in the art of the claimed invention's scope with reasonable certainty) related to the "overlay activation criterion" limitation as discussed and determined by the District Court and affirmed by the CAFC. The Examiner further notes that a

final holding of claim invalidity or unenforceability (after all appeals) is binding/controlling on the Office. Here, amended independent claims 1 and 13 at least maintain the identical scope as found indefinite by the District Court and affirmed by the CAFC.

The above rejection is not overcome by the cancelation of dependent claims 9 and 20. This issue appears to have been squarely addressed in the Decision by the CAFC (see: *TVnGO Ltd. v. LG Elecs.* U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021), p. 11: "merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of 'overlay activation criterion' in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in '[o]ther claims of the patent in question,' which 'can also be valuable sources of enlightenment as to the meaning of a claim term.' *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of 'overlay activation criterion' into doubt. These dependent claims are intrinsic evidence") and found unpersuasive. As noted by the CAFC, dependent claims 9 and 20 are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in the record. Merely canceling dependent claims 9 and 20 does not eliminate this vital intrinsic evidence from the prosecution history, and thus a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. Canceling dependent claims 9 and 20 does not change that.

If the Examiner agreed with Applicant that, "A reissue patent without those claims would no longer have a source of confusion/inconsistency…the skilled artisan would only discover the meaning of 'overlay activation criterion' as coming 'from the Internet'," then the Examiner would be inclined to reintroduce the recently withdrawn rejections under 35 U.S.C. 251 related

to claim scope broadening. That is to say, newly discovering that the meaning of "overlay activation criterion" only comes "from the Internet" is not simply correcting an antecedent basis issue that does not meaningfully change the scope of the claims.

Dependent claims 2-8, 10-12, 14-19, and 21 are similarly rejected at least via dependency.

Response to Arguments

22. Applicant's general arguments with respect to newly amended independent claims 1 and 13 have been considered but are moot in view of the new ground(s) of rejection. Additional details related to Applicant's general arguments are further discussed in the rejections above.

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam L Basehoar whose telephone number is (571)272-4121. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kosowski can be reached on 571-272-3744. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADAM L BASEHOAR/
Primary Examiner, Art Unit 3992

Conferees:

/JOSHUA D CAMPBELL/
Primary Examiner, Art Unit 3992

/ALEXANDER J KOSOWSKI/
Supervisory Patent Examiner, Art Unit 3992

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☑ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	10/17/2022	07/13/2023							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
	8	✓	✓							
	9	✓	O							
	10	✓	✓							
	11	✓	✓							
	12	✓	✓							
	13	✓	✓							
	14	✓	✓							
	15	✓	✓							
	16	✓	✓							
	17	✓	✓							
	18	✓	✓							
	19	✓	✓							
	20	✓	O							
	21	✓	✓							

Samsung
Ex. 1031 - Page 291

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

CPC - Searched*		
Symbol	Date	Examiner
H04N 21/(44016, 4782, 4316, 4622, 431)	10/17/2022	ALB

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
725	109	10/17/2022	ALB
715	717, 718	10/17/2022	ALB
345	629	10/17/2022	ALB

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Samsung
Ex. 1031 - Page 292

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	**Art Unit**
	Adam L Basehoar	3992

Search Notes		
Search Notes	**Date**	**Examiner**
Reviewed Prior Application(s) History/Cited Prior Art	10/17/2022	ALB
Inventor Name Search (PE2E)	10/17/2022	ALB
Recapture Review Conducted	10/17/2022	ALB
Litigation Search (07/26/2022)	10/17/2022	ALB
PE2E Text and Classification Search (see attached search history)	10/17/2022	ALB
Reviewed Applicant's Response (05/30/2023)	07/13/2023	ALB
Searched Patent Data Portal (Patent No. 9,407,969) - No Prior/ Pending Reexams/Reissues Found	07/13/2023	ALB
Searched P-TACTS (Patent No. 9,407,969) - No Prior/Pending AIA Proceedings Found	07/13/2023	ALB
Reviewed: TVnGO Ltd. v. LG Elecs. U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021) and Civil No. 18-10238 (RMB/KMW)	07/13/2023	ALB
Consulted Steve Stein (Managing Quality Assurance Specialist)	07/13/2023	ALB

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**

Samsung
Ex. 1031 - Page 293

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 17/867,612	Filing Date 07/18/2022	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $50 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $240 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	09/28/2023	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 19	Minus	** 21	= 0		x $40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 2	= 0		x $192 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/PATRICIA F LEWIS/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

AND GAIN THE UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

Appl No.:	**17/867,612 – Reissue of US 9,407,969**
Applicant:	**TVnGo Ltd. (BVI)**
Reissue Filing Date:	**July 18, 2022**
Art Unit:	**3992**
Examiner:	**Adam L. Basehoar**
Attorney Docket No.:	**103692.0001US4re**
Title	**FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AFTER-FINAL RESPONSE

Sir:

This paper responds to the Final Office Action dated July 31, 2023. Applicant respectfully requests reconsideration in view of the amendments and/or remarks included herein. Please enter the amendments shown herein.

- Claim amendments begin on page 2.
- Amendments to the Specification begin on page 7.
- Remarks begin on page 11.

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Thrice Amended) A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising:

(a) providing a combiner circuit at the user's premises, wherein:

the combiner circuit is coupled to a TV set and connected to a separate TV [timer]tuner box or TV tuner in the TV set, at the user's premises, and

the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the separate TV tuner box or the TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored,

an image indicative of the content associated with said overlay-enabling digital data, and

an overlay activation criterion; and

(b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said overlay activation criterion is met, wherein generating [an] the overlay includes:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

2. (Original) The method according to claim 1, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user profile.

3. (Twice Amended) The method according to claim 1, further including: receiving a command from [a] the user at said user premises; and responsive to said command, resizing said first portion and/or said second portion of said first display screen.

4. (Original) The method according to claim 1, wherein the content stored at said website enables streaming of digital data over the Internet; and

said method further including: pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

5. (Twice Amended) The method according to claim 1, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein said generating [an] the overlay further includes within said first display said one or more second images.

6. (Original) The method according to claim 1, wherein the overlay-enabling digital data is supplementary or complementary to the video signals.

7. (Original) The method according to claim 1, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

8. (Original) The method according to claim 1, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

9. (Cancelled)

10. (Original) The method according to claim 5, further including:

periodically accessing a web server for downloading said overlay-enabling digital data;

extracting from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

Samsung
Ex. 1031 - Page 297

retrieving and storing digital content from said web sites; and

if the overlay activation criterion is met and a user command that is associated with an image from amongst said one or more second images is identified, displaying the respective image from amongst the second images, accessing the respective web site associated with the displayed image and extracting and buffering content from the website.

11. (Original) The method according to claim 5, further comprising displaying a respective IP content when a corresponding one of said one or more second images is selected.

12. (Original) The method according to claim 7, including selecting specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

13. (Thrice Amended) A TV-Internet Integration circuit for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the TV-Internet Integration circuit comprising:

a combiner circuit at [a] the user's premises coupled to a separate TV tuner box or TV tuner,

wherein the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the combiner circuit at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored;

an image indicative of the content associated with said overlay-enabling digital data; and

an overlay activation criterion, wherein

Samsung
Ex. 1031 - Page 298

the combiner circuit is responsive to [an]the overlay activation criterion being met for generating a corresponding overlay, including:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, and generate a second video display screen including at least a portion which corresponds to said content; and

a video output interface, coupled to or integrated within the combiner circuit and configured to be coupled to a video input of said TV set and to display said first display screen or said second video display screen.

14. (Original) The TV-Internet Integration circuit according to claim 13, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user-profile.

15. (Thrice Amended) The TV-Internet Integration circuit according to claim 13, further including:

a command input for receiving a command from [a] the user at said user premises; and

a frame adjuster for resizing said first portion and/or said second portion of said first display screen in response to said command.

16. (Original) The TV-Internet Integration circuit according to claim 13, further including:

a receiver for receiving a digital data stream, wherein the stream of the digital data is enabled by the content stored at said website; and

a processing unit for pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

17. (Original) The TV-internet Integration circuit according to claim 13, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and

Samsung
Ex. 1031 - Page 299

wherein the combiner circuit is configured to:

periodically access a web server for downloading said overlay-enabling digital data;

extract from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieve and store digital content from said web sites; and

if the overlay activation criterion is met, and a user command that is associated with an image from amongst said one or more second images is identified, display the respective image from amongst the second images, access the respective web site associated with the displayed image and extract and buffer content from the website.

18. (Original) The TV-Internet Integration circuit according to claim 13, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

19. (Original) The TV-Internet Integration circuit according to claim 13, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

20. (Cancelled)

21. (Original) The TV-Internet Integration circuit according to claim 18, wherein the icon is colored so as to allow user selection of a specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at col. 3 ll. 39-64 as indicated below with marked and clean copies.

---Marked---

FIG. 1 is pictorial representation showing a mixed broadcast network 10 having a Cable TV Box 11 coupled to a satellite 12 and a Cable TV transmitter 13 for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server 14 via the Internet 15 (constituting a digital data communications network) to a TV-Internet Integration Box 16 (e.g., including a circuit, processor, etc.) for display on a TV set 17 coupled thereto. The TV set 17 may be constituted by a computer having a video card and a high resolution display monitor. However, the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box 16 is connected to the Cable TV Box 11 for combining the broadcast TV signals received by the Cable TV Box 11 with the IP packet data broadcast via the Internet 15. Also shown is an advertiser 18 having a computer coupled to the Internet 15 for downloading advertising content to the web server 14 for storage in a database 19 and a telephone 20 coupled to the TV-Internet Integration Box 16 for feeding telephony signals to the TV-Internet Integration Box 16, which combines the received telephony signals with video data received from the Cable TV Box 11 and/or the Internet 15.

---Clean---

FIG. 1 is pictorial representation showing a mixed broadcast network 10 having a Cable TV Box 11 coupled to a satellite 12 and a Cable TV transmitter 13 for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server 14 via the Internet 15 (constituting a digital data communications network) to a TV-Internet Integration Box 16 (e.g., including a

circuit, processor, etc.) for display on a TV set 17 coupled thereto. The TV set 17 may be constituted by a computer having a video card and a high resolution display monitor. However, the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box 16 is connected to the Cable TV Box 11 for combining the broadcast TV signals received by the Cable TV Box 11 with the IP packet data broadcast via the Internet 15. Also shown is an advertiser 18 having a computer coupled to the Internet 15 for downloading advertising content to the web server 14 for storage in a database 19 and a telephone 20 coupled to the TV-Internet Integration Box 16 for feeding telephony signals to the TV-Internet Integration Box 16, which combines the received telephony signals with video data received from the Cable TV Box 11 and/or the Internet 15.

Please replace the paragraph at col. 4, ln 27-57 as indicated below with marked and clean copies.

---Marked---

FIG. 3 is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box 16. In accordance with one embodiment of the invention, the subscriber selects what kind of IP content he wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed together with the TV broadcast data. For example, a subscriber may wish to block certain types of program material or may wish to [receives]receive details thereof only during limited hours, for example when the children are asleep. To this end, the subscriber is able to program the TV-Internet Integration Box 16 in much the same way that a video cassette recorder is programmed so as to store in the memory [25]26 a timetable indicating what type of IP data is to be displayed and when. The timetable is updated as and when required by the subscriber. The TV-Internet Integration Box 16 is adapted to check the timetable periodically and to filter out incoming IP content that is either of a type that is not required or that is broadcast during an unauthorized time window. By such means, an additional layer of authorization may be provided to that stored in the database 19 for access by the web server 14, thus allowing pre-fetching of IP content and storage in the memory [25]26 of the TV-Internet

Samsung
Ex. 1031 - Page 302

Integration Box 16. Upon detecting a matching event, corresponding to received IP content that is of interest to the subscriber, the TV-Internet Integration Box 16 overlays the matched IP content with the current broadcast and displays the new integrated video on the subscriber's TV set 17. For example, the matched information may be an icon that indicates to the subscriber that an Internet movie is currently being broadcast; or it may be an advertisement or information related to the TV program being broadcast.

---Clean---

FIG. 3 is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box 16. In accordance with one embodiment of the invention, the subscriber selects what kind of IP content he wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed together with the TV broadcast data. For example, a subscriber may wish to block certain types of program material or may wish to receive details thereof only during limited hours, for example when the children are asleep. To this end, the subscriber is able to program the TV-Internet Integration Box 16 in much the same way that a video cassette recorder is programmed so as to store in the memory 26 a timetable indicating what type of IP data is to be displayed and when. The timetable is updated as and when required by the subscriber. The TV-Internet Integration Box 16 is adapted to check the timetable periodically and to filter out incoming IP content that is either of a type that is not required or that is broadcast during an unauthorized time window. By such means, an additional layer of authorization may be provided to that stored in the database 19 for access by the web server 14, thus allowing pre-fetching of IP content and storage in the memory 26 of the TV-Internet Integration Box 16. Upon detecting a matching event, corresponding to received IP content that is of interest to the subscriber, the TV-Internet Integration Box 16 overlays the matched IP content with the current broadcast and displays the new integrated video on the subscriber's TV set 17. For example, the matched information may be an icon that indicates to the subscriber that an Internet movie is currently being broadcast; or it may be an advertisement or information related to the TV program being broadcast.

Please replace the paragraph at col. 6 ll. 48-67 as indicated below with marked and clean copies.

Samsung
Ex. 1031 - Page 303

---Marked---

FIG. 5 is a block diagram showing the functionality of the TV-Internet Integration Box 16 shown in FIG. 1. Thus, the TV-Internet Integration Box 16 comprises a first input 21 for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input 22 for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with predefined user-profiles associated with IP packet data and stored in the database 19. A combiner unit 23 (e.g., including a circuit) is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output 24 is coupled to the combiner unit 23 for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

---Clean---

FIG. 5 is a block diagram showing the functionality of the TV-Internet Integration Box 16 shown in FIG. 1. Thus, the TV-Internet Integration Box 16 comprises a first input 21 for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input 22 for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with predefined user-profiles associated with IP packet data and stored in the database 19. A combiner unit 23 (e.g., including a circuit) is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output 24 is coupled to the combiner unit 23 for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

Samsung
Ex. 1031 - Page 304

REMARKS/ARGUMENTS

The Final Office Action mailed by the Office on or about July 31, 2023 ("2023 July Final") has been received and carefully considered. After entry of this response, claims 1-8, 10-19 and 21 remain pending. Claims 9 and 20 will be cancelled claims.

Notice of Related Litigation and Request for Expedited "Special" Handling

Patent US 9,407,969 ("the '969 Patent") was the subject of litigation in the District of New Jersey (the "District Court" or "DC") as well as an appeal to the Federal Circuit (the "CAFC"). Orders from both courts rendered claims 1, 9, 10, 13, 17, and 20 of the '969 Patent invalid as indefinite. The District of New Jersey matter is Civil No. 18-10238 (RMB/KMW). The Federal Circuit matter is Case 20-1837. Pursuant to MPEP 1442, Applicant respectfully requests this matter be taken up for action in advance of other reissue applications.

Amended Claims (Claims 1, 3, 5, 9, 10, 13, 15, 17, and 20)

Claims 1, 3, 5, 13, and 15 are amended to address any apparent defects as to antecedent basis, at least in part. Applicant submits that such amendments cure any defects as to antecedent basis that may exist, and otherwise requests allowance. No new matter has been added.

Claim 1 is further amended to replace the term "TV timer box" with "TV tuner box" to correct a typographical error. The claim is also amended to later recite "the separate TV tuner box" for consistency in terminology. No new matter has been added.

Cancelled Claims (Claims 9 and 20)

Pursuant to MPEP 1453(II), a claim to be cancelled should be cancelled by a direction to cancel the claims. As such:

Please cancel claims 9 and 20.

Specification Amendments

The paragraphs at col. 3 ll. 39-64 and col. 6 ll. 48-67 are amended as enclosed herein. Claims 1, 13, and 17 include the term "combiner circuit" while claims 13-21 include the term

"TV-Internet Integration circuit", each of which is not literally described in the Specification. However, as the combiner unit and TV-Internet Integration unit described in the Specification receive, interpret, manipulate, and provide digital audio and video data, a PHOSITA would understand such units as including hardware known at the time for performing such tasks, for example circuits. Applicant thus amends the Specification as submitted herein to add the parenthetical that the combiner unit and TV-Internet Integration unit include processors, circuits, etc. No new matter is added.

The paragraphs at col 4, ln 27-57 have been amended to address an objection to the specification raised in the 2022 November OA. The numbering of the recited memory has been changed to "memory 26" instead of the previously-recited "memory 25". No new matter has been added.

Objections to the Claims

The claims have been objected to because the cancelled claims still presented the text of the cancelled claims. Claims 9 and 20 now no longer have the text of the cancelled claims, thus rendering the objection moot. Applicant respectfully requests withdrawal of the objection to the claims.

Objections to the Specification

The amendment to the specification was objected to because it lacked the entirety of a rewritten paragraph. More specifically, the section of col 4, ln 36-39 sought to be amended by should have included the full paragraph of col 4, ln 27-57, as indicated by the Examiner.

In response, the amendment to the specification contained herein includes the entire paragraph spanning lines 27-57 of column 4, thus rendering the objection moot.

The amendment to the specification was also objected to for new matter. Applicant respectfully disagrees. However, in the interest of advancing the application, the amendment to the specification at col 6, ln 48-67 has been amended to only recite a "circuit."

In view of the above, Applicant respectfully requests withdrawal of the objections to the specification.

35 USC § 251

Claims 1-8, 10-19 and 21 have been rejected under 35 USC 251 as being broadened in a reissue application filed outside the two-year statutory period. In response, Applicant notes the following:

The Examiner has indicated that claim 1 as amended has been broadened by the deletion of a separate "TV timer box" and the addition of only "a TV tuner box." Applicant respectfully disagrees. Nevertheless, in the interest of advancing prosecution, claim 1 has been amended according to the Examiner's suggestions as the intention is to correct a typographical error. This renders the rejection moot.

The claims were also rejected under 35 USC 251 as being improperly broadened in a reissue application made and sworn to by the assignee, and for being based on a defective Reissue Declaration. The change to the amendment to claim 1 renders the issue moot because, as noted by the Examiner, the suggested amendment does not broaden the scope of the claim.

Applicant notes that claims 13-19 and 21 are also included in the statement of rejection. However, claim 13 did not have the amendment of claim 1 that gave rise to the Examiner's rejection under 35 USC 251 and as such, claim 13 is not broadened in the same way. The only amendment to claim 13 is to correct an antecedent basis issue, which does not change the scope of the claim in any manner. Thus, it is Applicant's understanding that claims 13-19 and 21 were included in the statement of rejection by mistake. If the Examiner's intention was to reject claim 13 and its dependents under 35 USC 251, it is Applicant's position that the rejection of claim 13 under 35 USC 251 is improper and the reasons for the rejection of this claim have not been set forth in such a way that Applicant can make a proper reply.

For the reasons discussed above, Applicant respectfully requests withdrawal of the rejections under 35 USC 251.

35 USC § 112, 2nd Paragraph

Claims 1-8, 10-19 and 21 have been rejected under 35 USC §112, 2nd paragraph for being indefinite for "the same reasons related to the "overlay activation criterion" limitation as discussed and determined by the District Court and affirmed by the CAFC." (2023 July Final,

page 9). Applicant respectfully disagrees, especially in view of the cancellation of claims 9 and 20. In support Applicant notes the following:

A. Cancelling Claims 9 and 20 Resolves the Indefiniteness Issue of Claims 1 and 13 Because It Breaks the Link of Terminology Giving Rise to the Inconsistencies Leading to the Invalidity

As quoted by the Examiner, the rationale from the District Court and affirmed by the CAFC regarding the indefiniteness holding of claims 1 and 13 is as follows (page 9 of the 2023 July Final):

> With regards to the use of the term "overlay activation criterion", the Examiner notes that the District Court (see: Civil No. 18-10238 (RMB/KMW), Opinion (April 16, 2020)) determined that the term "'overlay activation criterion' ... neither of which are terms of art, nor defined by the specifications" is used in a manner "that is inconsistent with the use of that same term in dependent claims 9 and 20, and the specifications of both patents." Additionally, the District Court determined that "the intrinsic evidence presents a POSA with irreconcilably inconsistent information ... that 'overlay activation criterion' comes from the Internet and simultaneously not from the Internet ... Because the Court cannot construe the claims, they are indefinite." Similarly, the CAFC (see: TVnGO Ltd. v. LG Elecs. U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021)) highlighted the fact that there was a lack of intrinsic evidence as to the meaning of the term "overlay activation criterion" and pointed out that the term was not "mentioned, let alone defined, in the shared specification ... And the 'limited information' provided by the prosecution history isn't enough to provide certainty." Additionally, the CAFC also determined "one of ordinary skill would lack reasonably certainty as to the source of an 'overlay activation criterion' ... the intra-patent grounds discussed above are sufficient to establish indefiniteness ... The district court correctly concluded that the asserted claims are invalid for indefiniteness."

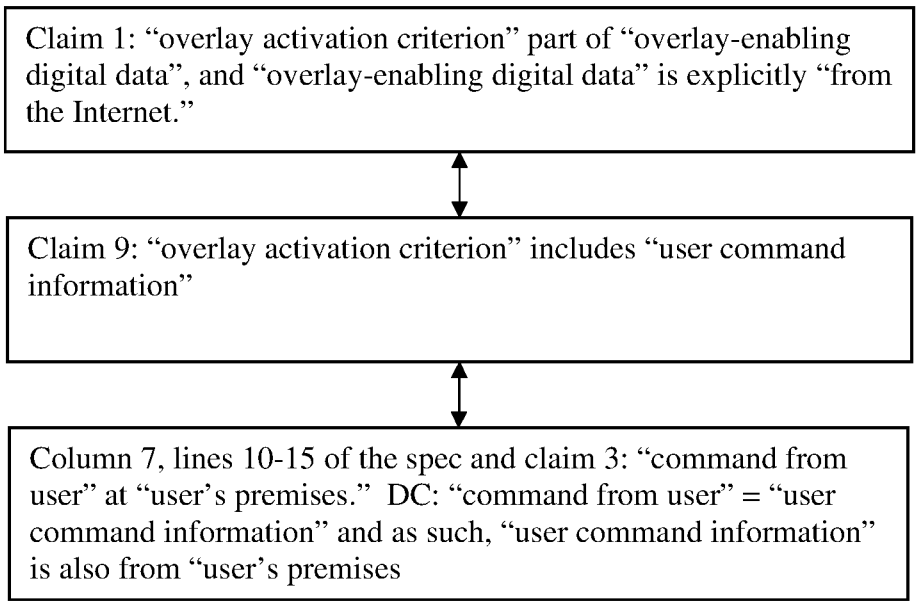
The DC's decision (affirmed by the CAFC) as discussed in the section quoted by the Examiner indicates that the indefiniteness of the claims is brought about an inconsistency created by the use of the term "overlay activation criterion" in independent claims 1 and 13 and then again in dependent claims 9 and 20. This inconsistency across the independent and dependent claims creates an uncertainty in the possible meaning of the claim, resulting in the indefiniteness of all of the claims.

The DC determined that in "claims 1, and 13, 'overlay activation criterion' must necessarily come from the Internet because the claim states that 'overlay activation criterion' is a

component of the 'overlay-enabling digital data' which data, the claim explicitly states, is provided 'over the Internet'". Thus, it is Applicant's understanding that the DC does not find an internal inconsistency within claim 1 and that as such, there is no uncertainty of the meaning of the terms of claim 1 in isolation – within claim 1, "overlay activation criterion" explicitly comes from the internet.

The inconsistency arises in dependent claims 9 and 20 because the DC found that the "user command information" may be a component of the "overlay activation criterion" and that the "user command information" comes from the user's premises. The DC arrived at this conclusion by equating the "user command information" of claims 9 and 20 with the "command from a user" of claim 3 and also column 7, lines 10-15 of the specification, which indicate that the "command from a user" is from "the user's premises."

Thus, visually, the link between the terminology that creates the discrepancy leading to the DC's finding of indefiniteness can be represented accordingly:



There is no direct link between the "overlay activation criterion" of claim 1 and the "command from the user" of claim 3 and the associated language of col 7, ln 10-15 in the specification. The link was created via the limitation of claim 9 and then the DC's linking of the

"user command information" of claim 9 to the "command from user" of claim 3 and corresponding language of the col 7, ln 10-15.

Because the DC was clear that in claim 1, the "overlay activation criterion" unequivocally comes from the Internet and because there is no direct link from the recitation of the "overlay activation criterion" claim 1 to the "command from the user" of claim 3 or the corresponding language of column 7, lines 10-15, cancelling claim 9 is sufficient to break the link between the "overlay activation criterion" and the "user command information" created via claim 9 and also the link found by the DC between the "user command information" of claim 9 and the language of column 7, lines 10-15 and the "command from the user" of claim 3. Therefore, the link between the recitation of "overlay activation criterion" coming from the Internet and the commands from a user coming from the user's premises of claim 3 and col 7, ln 10-15 of the specification is broken.

With the cancellation of claim 9, there is no other way to link a possible interpretation of the "overlay activation criterion" of claim 1 as coming "not from the Internet". Thus, with the cancellation of claim 9, the meaning of the term "overlay activation criterion" is consistent and thus definite. The arguments above also apply to the link between claims 13 and 20. A reissue patent without cancelled claims 9 and 20 would no longer have a source of confusion/inconsistency for the skilled artisan. Instead, the skilled artisan would only discover the meaning of "overlay activation criterion" as coming "from the Internet" of independent claims 1 and 13.

B. Cancelling Claims 9 and 20 Overcomes the Rejection under 35 USC 112, 2nd Paragraph Because There Would No Longer Be An Inconsistency In The Claims and The Prosecution History Would Similarly Make The Intended Interpretation of the Claims Clear

On page 10 of the 2023 July Final, the Examiner indicated that the rejections under 35 USC 112, 2nd paragraph would not be overcome by cancelling claims 9 and 20. The Examiner reasons that:

> Merely canceling dependent claims 9 and 20 does not eliminate this vital intrinsic evidence from the prosecution history, and thus a skilled artisan would still discover the

> inconsistency which throws the meaning of "overlay activation criterion" into doubt. Canceling dependent claims 9 and 20 does not change that.

Applicant respectfully disagrees. Cancelling claims effectively removes them from a reissued patent such that the link discussed that gives rise to the inconsistency and subsequently the indefiniteness no longer exists for the skilled artisan would find.

On page 11 of the CAFC decision states:

> Further, merely dismissing the dependent claims as **invalid**, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of 'overlay activation criterion' in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in '[o]ther claims of the patent in question,' which 'can also be valuable sources of enlightenment as to the meaning of a claim term.' Phillips, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are **invalid** does not change that. (emphasis added)

Here, the CAFC only discusses the invalidity of the claims at issue and does not address cancellation. A court finding the claims invalid is not the same thing as cancelling claims during a USPTO proceeding. A court can declare patent claims invalid during a proceeding. A court does not have the power to cancel or amend patent claims.

In the reasoning offered by the CAFC on page 11, the CAFC explains that the independent claims cannot be found to be valid and definite while the dependent claims are indefinite (and thus invalid) because the inconsistency raised by the dependent claims carries back to the terminology of the independent claims. This is because, per the DC and CAFC, the dependent claims exist as a source of claim interpretation of terminology found in the independent claim.

Thus, as long as the dependent claims are a part of the text of the patent, they remain a source of information for the interpretation of the independent claims. Unfortunately, this also means that, as long as the dependent claims remain a part of the text of the patent, the inconsistency also remains a part of the patent and the independent claims remain indefinite.

Cancelling claims, on the other hand, removes the text of the cancelled claim from the patent. After a claim is cancelled during prosecution, the issued patent (or reissued patent) is read as if the cancelled claim never existed. When a potential infringer reads an issued patent to determine whether their product or process infringes, they look at the issued claims and not the cancelled claims because the cancelled claims are not part of the patent.

As to the Examiner's assertion that even with the cancellation of claims, the skilled artisan would still find the inconsistency from the prosecution history, Applicant respectfully disagrees.

In *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, the CAFC stated as follows in a case involving a reissued patent (emphasis added):

> Finally, the prosecution history (sometimes called "file wrapper and contents") of the patent consists of the entire record of proceedings in the Patent and Trademark Office. This includes all express representations made by or on behalf of the applicant to the examiner to induce a patent grant, or, as here, to reissue a patent. Such representations include amendments to the claims and arguments made to convince the examiner that the claimed invention meets the statutory requirements of novelty, utility, and nonobviousness. **Thus, the prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.** *Standard Oil Co. v. American Cyanamid Co.,* 774 F.2d 448, 452 (Fed. Cir. 1985)

Were this application proceed to a reissued patent, a person reading the prosecution history would have access to the entire prosecution history, including this very document. Upon reading the reissued patent and prosecution history, the reader would not see cancelled claims 9 and 20 within the patent document itself. So there would be no confusion created by the text of the reissued patent document.

Further, when digging into the prosecution history, the reader would see that via the cancellation of claims 9 and 20, the Applicant intended to exclude the possibility that the claims could be interpreted to mean that the "overlay activation criterion" could come from the user's premises. To that point, Applicant states the following, to remove any doubt:

Dear Reader of the Prosecution History: Claims 9 and 20 are cancelled herein because it is Applicant's intent to remove any possible interpretation of the "overlay activation criterion" as coming from the user's premises (i.e., <u>not</u> from the internet).

Because the cancelled claims (in this case, claims 9 and 20) would not be part of the reissued patent and would not be available for a reader to read as a source of clarification or meaning within the patent text, and because the prosecution history would include a clear intent to remove the interpretation of "overlay activation criterion" that caused the inconsistency at the DC and CAFC levels, a reader of the patent and the prosecution history (including the reissue prosecution history) would not find the inconsistency within the claims to exist and would clearly understand the metes and bounds of the claims.

<u>C. Cancelling Claims 9 and 20 to Overcome the 35 USC 112, 2nd Paragraph Rejection Is Consistent With the DC and CAFC Rulings</u>

Applicant recognizes that the Office (in this case, the Examiner and subsequently possibly the Patent Trial and Appeal Board ("PTAB")) is bound to follow the DC and CAFC decisions with regard to the rejection under 35 USC 112, 2nd paragraph and that the Examiner and/or the PTAB cannot directly reverse the decision of the DC or the CAFC. Put another way, Applicant sees that overturning the rejection under 35 USC 112, 2nd paragraph requires an approach that resolves the indefiniteness issues noted by the DC and affirmed by the CAFC while simultaneously remaining consistent with the holding. It is Applicant's position that cancelling claims 9 and 20 without amending the independent claims 1 and 13 (such that their scope remains unchanged) resolves the indefiniteness issue as explained above, and also is consistent with the DC and CAFC decision such that withdrawing the current rejection under 35 USC 112, 2nd paragraph does not result in the Examiner attempting to reverse the courts' decisions or usurp their authority.

In reading the Examiner's rejection, Applicant interprets the arguments with an understanding that the Examiner is potentially interpreting the DC and CAFC decisions as deeming claims 9 and 20 necessary for the interpretation of the "overlay activation criterion" of claims 1 and 13 and that because of that, the DC and CAFC are in essence declaring that they

cannot be cancelled or otherwise removed from the text of the patent. This understanding comes from page 10 of the 2023 July Final, where the Examiner states:

> The above rejection is not overcome by the cancelation of dependent claims 9 and 20. This issue appears to have been squarely addressed in the Decision by the CAFC (see: TVnGO Ltd. v. LG Elecs. U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021), p. 11: "merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of 'overlay activation criterion' in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in '[o]ther claims of the patent in question,' which 'can also be valuable sources of enlightenment as to the meaning of a claim term.' Phillips, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of 'overlay activation criterion' into doubt. These dependent claims are intrinsic evidence") and found unpersuasive. As noted by the CAFC, dependent claims 9 and 20 are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in the record. Merely canceling dependent claims 9 and 20 does not eliminate this vital intrinsic evidence from the prosecution history, and thus a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. Canceling dependent claims 9 and 20 does not change that.

Applicant respectfully disagrees and notes the following:

Applicant notes that the CAFC is not declaring that dependent claims cannot be cancelled to address the indefiniteness. The relevant section quoted by the Examiner is as follows:

> merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of 'overlay activation criterion' in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in '[o]ther claims of the patent in question,' which 'can also be valuable sources of enlightenment as to the meaning of a claim term.' Phillips, 415 F.3d at 1314

The Examiner further paraphrases the CAFC, indicating:

> As noted by the CAFC, dependent claims 9 and 20 are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in the record. Merely **canceling** dependent claims 9 and 20 does not eliminate this vital intrinsic evidence from the prosecution history, and thus a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. **Canceling** dependent claims 9 and 20 does not change that. (emphasis added)

However, the CAFC decision does not actually say anything about cancelling the claims. The actual text of the CAFC decision reads on page 11:

> Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are **invalid** does not change that. (emphasis added)

Invalidating the claims at the trial level is not the same as cancelling claims during a USPTO proceeding or process (such as a reissue application prosecution or a disclaimer). When a claim is invalidated by a court, the document of the patent itself doesn't change. Actually changing the text of the patent can only be done via the avenues available through the USPTO.

Here, the CAFC is not stating that the claims cannot be cancelled. Instead, the CAFC is stating that, because the dependent claims remain in the text of the patent even if invalidated at the court level, it is not possible to leave the dependent claims as invalid for being indefinite while declaring the independent claims are valid. In other words, as long as the indefinite dependent claims remain in the text of the patent, then the independent claims must also be indefinite because the text of claims 9 and 20 help inform the reader of the possible meanings of the terms in claims 1 and 13, respectively. In the section of page 11 referenced by the Examiner, the CAFC is responding to an argument made by TVnGO on pages 5-6 of the Plaintiff's Brief In Response to the Court's March 6, 2020 Order ("Order").

On pages 5-6 of the Order, TVnGO argued that a determination of invalidity of a dependent claim should not affect validity of an otherwise clear independent claim. The CAFC disagreed with this, with the reasoning set forth on page 11 of the CAFC decision. Nothing in this section of the CAFC decision or any other part of the CAFC decision (or the District Court decision, for that matter) indicates that the claims can't be cancelled or that the dependent claims **MUST** remain in the text of the patent. As noted above, this section only indicates that the dependent claims, as a source of potential claim interpretation, affect the interpretation of the terms of the independent claims. In this case, this means that the inconsistency that makes the dependent claims indefinite also renders the independent claims indefinite.

Because the CAFC and/or the DC never said the claims could not be cancelled, cancelling dependent claims 9 and 20 to remove the inconsistency and thus the indefiniteness of respective independent claims 1 and 13 does not contradict the DC or the CAFC decisions.

D. Scope Of Claims Not Enlarged Because Claims Are Fundamentally Unchanged

The independent claims 1 and 13 rejected in the 2023 July Final are substantially identical to those presented in this response and the minor differences do not change the claim scope from the rejected claims or from the scope of the claims on the patent. The Examiner appears to agree, stating on page 10 of the 2023 July Final that the "amended independent claims 1 and 13 at least maintain the identical scopes found indefinite by the District Court and affirmed by the CAFC."

In the 2023 July Final, the Examiner indicates that:

> If the Examiner agreed with Applicant that, "A reissue patent without those claims would no longer have a source of confusion/inconsistency ... the skilled artisan would only discover the meaning of 'overlay activation criterion' as coming 'from the Internet'," then the Examiner would be inclined to reintroduce the recently withdrawn rejections under 35 U.S.C. 251 related to claim scope broadening.

Applicant is confused as to how this hypothetical rejection could be rationally supported given that the Examiner recognizes that the scope of the current independent claims is identical to those of the claims rejected by the DC and affirmed by the CAFC. It is unclear how a claim could go from "identical scope" to "different scope" without touching the language of the claim itself.

E. The Purpose of the Reissue Process is to Correct Deficient Patents, Including Indefiniteness Issues

Applicant asserts that the cancellation of claims 9 and 20 resolves the indefiniteness issue raised by the DC and the CAFC while remaining consistent with those decisions. As noted above and agreed upon by the Examiner, the scope of claims 1 and 13 has not changed.

If a claim whose scope has been unchanged can nevertheless be declared to have been improperly broadened, this seems to imply that an indefinite claim in a patent (or potentially

indefinite in an unlitigated patent) that is over two years after issue can *never* be corrected via reissue because it will *always* be considered to be improperly broadened.

As stated by the court in *In re Altempohl,* 500 F.2d 1151 (Fed. Cir. 1974), "[i]n as much as 35 USC 251 is a remedial provision, which should be liberally construed, a patentee should be allowed to correct an error or ambiguity in a claim without having to rely on implication or litigation." (*Altempohl* at 1156-1157). To effectively render any indefiniteness issue unrecoverable for patents after two years of issue would run counter to the court-recognized remedial nature of the reissue process.

However, courts have shown that this is not the intent. In *Slimfold Mfg. Co v Kinkead Props.* 626 F.Supp 493 (1956), correcting an antecedent basis issue during reissue does not meaningfully change the scope of the claim. (*Slimfold* at 497-498). *Slimfold* cites to *In re Altempohl,* 500 F.2d 1151 (Fed. Cir. 1974), which states that "[l]ack of antecedent basis in a claim could render it invalid under 35 USC 112, second paragraph, and correction of such a defect by reissue should not have to depend on difference in scope of the claim." (*Altempohl* at 1156). To effectively render any indefiniteness issue unrecoverable would run counter to the court-recognized remedial nature of the reissue process.

While the issue raised by the DC and CAFC in this situation is not an antecedent basis issue, these holdings show that courts have ruled on the possibility of using reissue to correct issues that could give rise to indefiniteness – especially where the scope of the claim on its face is fundamentally unchanged. Here, the scope of the independent claims is unchanged and as such this is one such case where a holding of indefiniteness should be correctable via reissue, which is in line with the whole purpose of the reissue process and consistent with court decisions that make such a correction permissible.

Request For Allowance

In view of the remarks presented above, the Applicant respectfully requests allowance of all pending claims.

Respectfully submitted,
Fish IP Law, LLP

Date: September 28, 2023

By: __/Tomas A. Prieto/____
Tomas A. Prieto
Reg. No. 60,675

Fish IP Law, LLP
19900 MacArthur Blvd., Suite 810
Irvine, CA 92612
Telephone (949) 943-8300
Fax (949) 943-8358

Electronic Acknowledgement Receipt

EFS ID:	48658411
Application Number:	17867612
International Application Number:	
Confirmation Number:	8539
Title of Invention:	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL
First Named Inventor/Applicant Name:	Yakkov MERLIN
Customer Number:	24392
Filer:	Tomas Prieto/Tammy Lightman
Filer Authorized By:	Tomas Prieto
Attorney Docket Number:	103692.0001US4re
Receipt Date:	28-SEP-2023
Filing Date:	18-JUL-2022
Time Stamp:	22:29:43
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Response-02L-TVnGO1US4RE-FILED.pdf	121092 d8bb9628da681e4b828ba147d476e7cedbb976c6	yes	24

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Response After Final Action	1	1
	Claims	2	6
	Specification	7	10
	Applicant Arguments/Remarks Made in an Amendment	11	24
Warnings:			
Information:			
	Total Files Size (in bytes):	121092	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	17867612
Filing Date	2022-07-18
First Named Inventor	Yakkov MERLIN
Art Unit	3992
Examiner Name	BASEHOAR, ADAM L
Attorney Docket Number	103692.0001US4re

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	17867612
	Filing Date	2022-07-18
	First Named Inventor	Yakkov MERLIN
	Art Unit	3992
	Examiner Name	BASEHOAR, ADAM L
	Attorney Docket Number	103692.0001US4re

	1	Office Action dated September 28, 2022 in US Application No. 17/714917, 16 pages.
	2	Plaintiff's Brief in Response to the Court's March 6, 2020 Order in Civil Action No. 1:18-cv-10238-RMB-KMW, US District Court for the District of New Jersey, 15 pages.

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	17867612
Filing Date	2022-07-18
First Named Inventor	Yakkov MERLIN
Art Unit	3992
Examiner Name	BASEHOAR, ADAM L
Attorney Docket Number	103692.0001US4re

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Tomas A. Prieto/	Date (YYYY-MM-DD)	2023-10-23
Name/Print	Tomas A. Prieto	Registration Number	60675

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	17867612
Filing Date:	18-Jul-2022
Title of Invention:	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL
First Named Inventor/Applicant Name:	Yakkov MERLIN
Filer:	Tomas Prieto/Tammy Lightman
Attorney Docket Number:	103692.0001US4re

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	2806	1	104	104
		Total in USD ($)		**104**

Electronic Acknowledgement Receipt

EFS ID:	48752945
Application Number:	17867612
International Application Number:	
Confirmation Number:	8539
Title of Invention:	FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL
First Named Inventor/Applicant Name:	Yakkov MERLIN
Customer Number:	24392
Filer:	Tomas Prieto/Tammy Lightman
Filer Authorized By:	Tomas Prieto
Attorney Docket Number:	103692.0001US4re
Receipt Date:	23-OCT-2023
Filing Date:	18-JUL-2022
Time Stamp:	17:31:19
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$104
RAM confirmation Number	E20230MH32337405
Deposit Account	500341
Authorized User	Tammy Lightman

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	IDS-1-TVnGO1US4RE_2023-10-23.pdf	1034514 bc700ce83489a64f4d35c99b63e8655455653fb8	no	4
Warnings:					
Information:					
A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
2	Other reference-Patent/Application/ Search Documents	Other-TVnGO-Inconsistencies-answer.pdf	200584 f321cfebeca608e2f822edcd06110dc968411728	no	15
Warnings:					
Information:					
3	Other reference-Patent/Application/ Search Documents	Office-Action-01-TVnGO1US1re_2022-09-28.pdf	910301 5dab23b199a61b720d4d4c591f2aa32a9e5b2149	no	16
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	38213 424e1b8248453e0940b665f1ae4baf8026cb0547	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2183612		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 11/07/2023

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
11/07/2023	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com
eofficeaction@appcoll.com

Advisory Action Before the Filing of an Appeal Brief	Application No. 17/867,612	Applicant(s) MERLIN, Yakkov	
	Examiner Adam L Basehoar	Art Unit 3992	AIA (FITF) Status No

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 28 September 2023 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☑ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires ____ months from the mailing date of the final rejection.
   b) ☑ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection.The current period for reply expires ____ months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANTS FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____ (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☑ Applicant's reply has overcome the following rejection(s): See Continuation Sheet
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☑ For purposes of appeal, the proposed amendment(s):(a) ☐ will not be entered, or (b) ☑ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____
9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☑ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
13. ☑ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). 10/23/2023
14. ☐ Other: _____.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed:_____.
    Claim(s) objected to:_____.
    Claim(s) rejected:1-8,10-19 and 21.
    Claim(s) withdrawn from consideration:_____.

/ADAM L BASEHOAR/ Primary Examiner, Art Unit 3992	/A.J.K/ Supervisory Patent Examiner, Art Unit 3992

Continuation of AMENDMENTS 5. Applicant's reply has overcome the following rejection(s):
The Examiner notes that the amendment to independent claim 1 at least overcomes (1) the rejection of claims 1-8, 10-19, and 21 under 35 U.S.C. 251 as being broadened in a reissue application filed outside the two year statutory period (see: Final Action, pp. 6-7), (2) the rejection of claims 1-8, 10-19, and 21 under 35 U.S.C. 251 as being improperly broadened in a reissue application made and sworn to by the assignee (see: Final Action, p. 7), and (3) the rejection of claims 1-8, 10-19, and 21 under 35 U.S.C. 251 as being based upon a defective Reissue Declaration (see: Final Action, pp. 7-8).
Regarding the withdrawn rejection of claims 1-8, 10-19, and 21 under 35 U.S.C. 251 as being broadened in a reissue application filed outside the two year statutory period, the Examiner notes that if there is any claim that is broader in scope than the original patent claims and if there is no clear intent to broaden the patent claims present within two years of the grant of the original patent, then all claims should be rejected under 35 USC 251 using form paragraph 14.12. Therefore, claims 13-19 and 21 were not included by mistake even though, as Applicant correctly points out, independent claim 13 did not have the amendment of independent claim 1 that gave rise to the rejection under 35 U.S.C. 251. Regardless, Applicant has properly overcome the corresponding rejection of claims 13-19 and 21 in light of the amendment to independent claim 1.
The Examiner also notes that the amendments to dependent claims 9 and 20 overcome the claim objection for failing to comply with 37 CFR 1.173(b)(2) (see: Final Action, p. 5).
The Examiner further notes that the amendment to the specification overcomes the specification objection for failing to comply with 37 CFR 1.173(b)(1) (see: Final Action, p. 5) and the specification objection under 35 U.S.C. 251 (see: Final Action, pp. 5-6).

Continuation of REQUEST FOR RECONSIDERATION/OTHER 12. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: Claims 1-8, 10-19, and 21 remain rejected (see: Final Action, pp. 8-11) under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Applicant's arguments filed 09/28/2023 have been fully considered but they are not persuasive.

The Examiner initially notes that amended independent claims 1 and 13 at least maintain virtually identical scope as their corresponding claims in the Merlin '969 patent which were determined to be invalid for indefiniteness by the District Court. That determination by the District Court was then affirmed by the CAFC.

Regarding (A), the Examiner notes that cancelling dependent claims 9 and 20 does not resolve the indefiniteness issue of claims 1 and 13. The term "overlay activation criterion" is still recited in each of independent claims 1 and 13, and it is the use of this term, in view of the intrinsic evidence (e.g., the claims, written description, prosecution history, etc.) on the meaning of said term in the record, that fails to inform a person of ordinary skill in the art of the claimed invention's scope with reasonable certainty. Cancelling dependent claims 9 and 20 does not eliminate the vital intrinsic evidence (see: CAFC Decision, p. 10: "the intrinsic evidence presents…irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously not from the Internet") from the prosecution history, and thus a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. That is to say, the intrinsic evidence of at least the prosecution history remains and it would still be a source of confusion/inconsistency for the skilled artisan.

Regarding (B), the Examiner notes that the use of "overlay activation criterion" in dependent claims 9 and 20 in a way that contradicts the independent claims prevents reasonable certainty. And dependent claims 9 and 20 are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in the record. That is to say, "neither 'overlay activation criterion'…has an ordinary meaning in the art…The

patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification …the 'limited information' provided by the prosecution history isn't enough to provide reasonable certainty here…This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies" (see: CAFC Decision, pp. 7-8).

However, even if dependent claims 9 and 20 were cancelled, a cancelled claim is not removed from the prosecution history and is consequently available for use in construing the remaining claims of the patent. Cancelled dependent claims can be used to construe an independent claim because the dependent claims are included in the prosecution history, which becomes a part of the public record demonstrating Applicant/Patent Owner's understanding of its own claim terms. Thus, as noted above, a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. Applicant's arguments as to the proper metes and bounds of independent claims 1 and 13 do not supersede one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" already in the record. In fact, this issue appears to have been generally addressed in the Decision by the CAFC (see: CAFC Decision, p. 10: "For its part, TVnGO asserts that an overlay activation criterion 'comes from the Internet,'…This distinction lacks intrinsic support").

Regarding (C), the Examiner notes that a final holding of claim invalidity or unenforceability (after all appeals) is binding/controlling on the Office. Here, amended independent claims 1 and 13 at least maintain the virtually identical scope as found indefinite by the District Court and affirmed by the CAFC. Aside from Applicant arguments, independent claims 1 and 13 have not been amended in a substantive way and there has not been a sufficient showing of facts not previously considered in the record.

To be clear, the Examiner is not saying that dependent claims 9 and 20 cannot be cancelled or otherwise removed from the text of the patent. And the Examiner appreciates the distinction between invalidating claims at the trial level and cancelling claims during a USPTO proceeding. However, as discussed above, cancelling or otherwise removing dependent claims 9 and 20 from the text of the patent would not overcome the indefiniteness rejection under 35 U.S.C. 112 (pre-AIA), second paragraph.

It is noted that the referenced arguments in TVnGO's Order appear to hinge on the idea that the "scope of the independent claim whose meaning is clear on its face" or "[W]here the scope of the independent claim is clear." However, as determined by the CAFC, when all the intrinsic evidence is properly evaluated the scope of independent claims 1 and 13 are not clear and thus invalid for indefiniteness.

Regarding (D), the Examiner agrees, as noted above, that amended independent claims 1 and 13 at least maintain virtually identical scope as their corresponding claims in the Merlin '969 patent that were found indefinite by the District Court and affirmed by the CAFC. That is to say, current amended independent claims 1 and 13 present irreconcilable inconsistencies (i.e., the "overlay activation criterion" indicating that it comes from the Internet and simultaneously not from the Internet (i.e., from a user's premises)) that render their precise meanings not reasonably certain.

The Examiner's position is that if the Applicant was correct, based on Applicant's argument (i.e., "Claims 9 and 20 are cancelled herein because it is Applicant's intent to remove any possible interpretation of the ' overlay activation criterion' as coming from the user's premises (i.e., not from the internet)") and the cancelling of dependent claims 9 and 20, that "the skilled artisan would only discover the meaning of ' overlay activation criterion' as coming 'from the Internet," then the scope of amended independent claims 1 and 13 would indeed be changed. In that case, independent claims 1 and 13 found indefinite by the District Court, and subsequently affirmed as indefinite by the CAFC, would now be definite in light of the disclosure of the Merlin '969 patent. However, as previously noted (e.g., see: (1) Non-Final Action, pp. 4-5 in 17/867,612 and (2) Final Action, pp. 4-6 in related 17/714,917 – citing Ex parte Adams, Appeal 2007-0441 (March 14, 2007)), this would be considered an enlarging of the scope of the claims (e.g., see: MPEP 1412.03(I) - "For example, if any amended or newly added claim in the reissue contains within its scope any conceivable product or process which would not have infringed the patent, then that reissue claim would be broader than the patent claims...A claim which covers something that the original claims do not is a broadened claim. A claim would be considered a broadening claim if the patent owner would be able to sue any party for infringement who previously could not have been sued for infringement") of the Merlin '969 patent which would be improper since the instant reissue application was filed more than

two years after the Merlin '969 patent issued.
The Examiner notes that disavowing claim scope related to the "overlay activation criterion" limitation without substantively amending the language of independent claims 1 and 13 appears to be precisely what Applicant is attempting to accomplish in the instant reissue application.

Regarding (E), the Examiner notes, as discussed above, that amended independent claims 1 and 13 at least maintain virtually identical scope as their corresponding claims in the Merlin '969 patent that were found indefinite by the District Court and affirmed by the CAFC. Therefore, while it does not resolve the indefiniteness rejection under 35 U.S.C. 112 (pre-AIA), second paragraph, the cancellation of dependent 9 and 20 is not precluded in the instant reissue application.
As previously noted, changing the meaning of "overlay activation criterion" to only come "from the Internet" would not be simply correcting an antecedent basis issue that does not meaningfully change the scope of the claims. In fact, as recognized by Applicant, this situation is not a basic antecedent basis issue. The Examiner notes that 35 U.S.C. 251 imposes strict limits (see: MPEP 1412.03) related to a "broadened reissue claim" when a reissue application is filed after two years from the grant of the original patent (e.g., see: Informative Decision - Ex parte Adams, Appeal 2007-0441 (March 14, 2007) which is related to attempting to change indefinite patent claims with substantially similar "irreconcilable inconsistencies" in a reissue application filed more than two years after the patent issued).

Conferees:

/ROBERT L NASSER/
Primary Examiner, Art Unit 3992

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

CPC - Searched*		
Symbol	Date	Examiner
H04N 21/(44016, 4782, 4316, 4622, 431)	10/17/2022	ALB

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
725	109	10/17/2022	ALB
715	717, 718	10/17/2022	ALB
345	629	10/17/2022	ALB

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Samsung
Ex. 1031 - Page 335

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

Search Notes		
Search Notes	**Date**	**Examiner**
Reviewed Prior Application(s) History/Cited Prior Art	10/17/2022	ALB
Inventor Name Search (PE2E)	10/17/2022	ALB
Recapture Review Conducted	10/17/2022	ALB
Litigation Search (07/26/2022)	10/17/2022	ALB
PE2E Text and Classification Search (see attached search history)	10/17/2022	ALB
Reviewed Applicant's Response (05/30/2023)	07/13/2023	ALB
Searched Patent Data Portal (Patent No. 9,407,969) - No Prior/ Pending Reexams/Reissues Found	07/13/2023	ALB
Searched P-TACTS (Patent No. 9,407,969) - No Prior/Pending AIA Proceedings Found	07/13/2023	ALB
Reviewed: TVnGO Ltd. v. LG Elecs. U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021) and Civil No. 18-10238 (RMB/KMW)	07/13/2023	ALB
Consulted Steve Stein (Managing Quality Assurance Specialist)	07/13/2023	ALB
Reviewed Applicant's After Final Response (09/28/2023)	10/06/2023	ALB
Consulted Drew Fischer (Supervisory Patent Examiner)	10/25/2023	ALB

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**

Samsung
Ex. 1031 - Page 336

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	17867612
Filing Date	2022-07-18
First Named Inventor	Yakkov MERLIN
Art Unit	3992
Examiner Name	BASEHOAR, ADAM L
Attorney Docket Number	103692.0001US4re

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

EFS Web 2.1.18

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.L.B/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	17867612
Filing Date	2022-07-18
First Named Inventor	Yakkov MERLIN
Art Unit	3992
Examiner Name	BASEHOAR, ADAM L
Attorney Docket Number	103692.0001US4re

	1	Office Action dated September 28, 2022 in US Application No. 17/714917, 16 pages.
	2	Plaintiff's Brief in Response to the Court's March 6, 2020 Order in Civil Action No. 1:18-cv-10238-RMB-KMW, US District Court for the District of New Jersey, 15 pages.

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/ADAM L BASEHOAR/	Date Considered	10/25/2023

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.L.B/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	17867612
Filing Date	2022-07-18
First Named Inventor	Yakkov MERLIN
Art Unit	3992
Examiner Name	BASEHOAR, ADAM L
Attorney Docket Number	103692.0001US4re

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Tomas A. Prieto/	Date (YYYY-MM-DD)	2023-10-23
Name/Print	Tomas A. Prieto	Registration Number	60675

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.L.B/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.L.B/

REISSUE LITIGATION

AND GAIN THE UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

Appl No.:	**17/867,612 – Reissue of US 9,407,969**
Applicant:	**TVnGo Ltd. (BVI)**
Reissue Filing Date:	**July 18, 2022**
Art Unit:	**3992**
Examiner:	**Adam L. Basehoar**
Attorney Docket No.:	**103692.0001US4re**
Title	**FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AFTER-FINAL RESPONSE

Sir:

This paper responds to the Final Office Action dated July 31, 2023. Applicant respectfully requests reconsideration in view of the amendments and/or remarks included herein. Please enter the amendments shown herein.

- Claim amendments begin on page 2.
- Amendments to the Specification begin on page 7.
- Remarks begin on page 11.

OK TO ENTER: /A.L.B/

PTO/AIA/31 (03-14)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

NOTICE OF APPEAL FROM THE EXAMINER TO THE PATENT TRIAL AND APPEAL BOARD

Docket Number (Optional): 103692.0001US4re

I hereby certify that this correspondence is being facsimile transmitted to the USPTO, EFS-Web transmitted to the USPTO, or deposited with the United States Postal Service with sufficient postage in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, on Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on November 30, 2023.

Signature /Lisa Bithell/

Typed or printed name Lisa Bithell

In re Application of: TVnGo Ltd. (BVI)

Application Number	Filed
17/867,612	July 18, 2022

For: FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CI

Art Unit	Examiner
3992	BASEHOAR, ADAM L

Applicant hereby **appeals** to the Patent Trial and Appeal Board from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20(b)(1)) $ 840.00

☑ Applicant asserts small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by 50%, and the resulting fee is: $ 336.00

☐ Applicant certifies micro entity status. See 37 CFR 1.29. Therefore, the fee shown above is reduced by 75%, and the resulting fee is: $ _____
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 500341.

☑ Payment made via EFS-Web.

☑ A petition for an extension of time under 37 CFR 1.136(a) (PTO/AIA/22 or equivalent) is enclosed.
For extensions of time in reexamination proceedings, see 37 CFR 1.550.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant

☑ attorney or agent of record
Registration number 60675

☐ attorney or agent acting under 37 CFR 1.34
Registration number _____

Signature /Tomas A. Prieto/

Typed or printed name Tomas A. Prieto

Telephone Number 949-943-8300

Date November 30, 2023

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 41.20(b)(1) and 41.31. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC PAYMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	11/30/2023 03:24:27 PM Z ET	103692.0001US4re

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Lisa Bithell
PATENT CENTER #	63442319	AUTHORIZED BY	Tomas Prieto
CUSTOMER #	24392	FILING DATE	07/18/2022
CORRESPONDENCE ADDRESS	-	FIRST NAMED INVENTOR	Yakkov MERLIN

Payment Information

PAYMENT METHOD	PAYMENT TRANSACTION ID	PAYMENT AUTHORIZED BY
DA / 500341	E2023ATF25498091	Lisa Bithell

PRE-AUTHORIZED ACCOUNT

500341

PRE-AUTHORIZED CATEGORY

37 CFR 1.16 (National application filing, search, and examination fees); 37 CFR 1.17 (Patent application and reexamination processing fees); 37 CFR 1.19 (Document supply fees); 37 CFR 1.20 (Post Issuance fees); 37 CFR 1.21 (Miscellaneous fees and charges)

FEE CODE	DESCRIPTION	ITEM PRICE($)	QUANTITY	ITEM TOTAL($)
2401	NOTICE OF APPEAL	336.00	1	336.00
2251	EXTENSION FOR RESPONSE WITHIN FIRST MONTH	88.00	1	88.00
			TOTAL AMOUNT:	$424.00

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as

described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	**11/30/2023 03:24:27 PM Z ET**	**103692.0001US4re**

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Lisa Bithell
PATENT CENTER #	63442319	FILING DATE	07/18/2022
CUSTOMER #	24392	FIRST NAMED INVENTOR	Yakkov MERLIN
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	Tomas Prieto

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Notice-of-Appeal-TVnGO1US4re.pdf	2	Notice of Appeal Filed	253 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
Notice-of-Appeal-TVnGO1US4re.pdf	FE1F3D377BCBF193EAC6ACBCB1B69EE65A533B7C1A323B097AFEE651B42E830FB0088B397573600FA9F7F5B0B085783AB108B181308FACAF4D1BA44CF1A7BA2A

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized

by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 12/08/2023

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
12/08/2023	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com
eofficeaction@appcoll.com

Applicant-Initiated Interview Summary	**Application No.** 17/867,612	**Applicant(s)** MERLIN, Yakkov		
	Examiner Adam L Basehoar	**Art Unit** 3992	**AIA (First Inventor to File) Status** No	**Page** 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	**Title**	**Type**
Adam L Basehoar	Primary Examiner	Telephonic
Andrew Fischer	SPE	
Dennis Bonshock	Primary Examiner	
Tomas Prieto (Reg. No. 60,675)	Agent of Record	

Date of Interview: 30 November 2023

Issues Discussed:

Other

Constructively discussed Applicant's After-Final Response (filed 09/28/2023) in view of the Examiner's Advisory Action (mailed 11/07/2023). The rejection under 35 U.S.C. 112 (pre-AIA), second paragraph, was examined in view of the intrinsic evidence of the Merlin '969 patent and the determinations made by the District Court and the CAFC. Additionally, potential broadening under 35 U.S.C. 251 was discussed in view of the informative PTAB decision, Ex parte Adams. In general, the interview was designed to help clarify issues for Applicant's subsequent appeal. No specific agreement was reached.

/ADAM L BASEHOAR/ Primary Examiner, Art Unit 3992	

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04
Please further see:
MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl No.:	**17/867,612 – Reissue of US 9,407,969**
Appellant:	**TVnGO Ltd. (BVI)**
Filing Date:	**July 18, 2022**
Art Unit:	**3992**
Examiner:	**Basehoar, Adam L.**
Attorney Docket No.:	**103692.0001US4re**
Title	**FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

MS Appeal Brief - Patents
Commissioner of Patents and Trademarks
Washington, D.C. 20231
Attention: Patent Trial And Appeals Board

APPELLANT'S BRIEF UNDER 37 CFR § 41.37

This brief follows the appellant's Notice of Appeal filed in this matter on November 30, 2023. The fees required under § 41.20, and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains the following items under the headings in the order here indicated:

I. Real Party In Interest

II. Related Appeals, Interferences, And Trials

III. Summary Of Claimed Subject Matter

IV. Argument

V. Claims Appendix

Samsung
Ex. 1031 - Page 350

I. Real Party In Interest

The real party in interest is TVnGO Ltd. (BVI)

Samsung
Ex. 1031 - Page 351

II. Related Appeals, Interferences, and Trials

Patent US 9,407,969 ("the '969 Patent") was the subject of litigation in the District of New Jersey as well as an appeal to the Federal Circuit. Orders from both courts rendered claims 1, 9, 10, 13, 17, and 20 of the '969 Patent invalid as indefinite. The District of New Jersey matter is Civil No. 18-10238 (RMB/KMW). The Federal Circuit matter is Case 20-1837.

Patent US 8,132,220 ("the '220 Patent"), owned by the same Assignee, was also the subject of the same litigation. Orders from both courts rendered claims 1, 9, 10, 13, 17, and 20 of the '220 Patent invalid as indefinite. Reissue application 17/714,917 was filed for the '220 Patent, and a Notice of Appeal was filed on reissue application 17/714,917 on August 31, 2023.

Samsung
Ex. 1031 - Page 352

III. Summary Of Claimed Subject Matter

Supporting passages are provided in brackets pointing to sections of the Patent US 9,407,969, filed as application number 17/867,612 for the current reissue proceedings.

A) **Independent Claim 1** is directed to a method for generating an overlay using video signals at a user's premises, that includes a combiner circuit coupled to a TV set and connected to a TV tuner box or TV tuner in the TV set (col 3, ln 39-64), where the combiner circuit is connected through distinct networks to a video signal source that provides video signals and an Internet data source that provides overlay-enabling data over the internet (col 6, ln 48-67). The video signals and overlay-enabling data come from different sources that are distinct and independent inputs (col 3, ln 39-64; Fig. 1). The overlay-enabling data includes at least a Web link, an image indicative of content associated with the overlay-enabling digital data and an overlay activation criterion (col 5, ln 29-44; col 7, ln 62-col 8, ln 15). The method further includes the steps of processing the overlay-enabling digital data to generate an overlay if a criterion is met, where the generation of the overlay includes generating a first display screen having a first portion corresponding to the video signals and an association of the Web link with the a second portion portion such that the content can be retrieved and displayed on a second display screen on the TV set . (col 5, ln 29-44; col 7, ln 62-col 8, ln 51; Fig. 7A-8)

B) **Independent Claim 13** is directed to a TV-Internet Integration circuit used to generate an overlay at a user's premises that includes a combiner circuit coupled to a separate TV Tuner Box or TV Tuner (col 6, ln 48-col 7, ln 15; Fig. 5). The combiner circuit is also connected through distinct networks to a video signal input that provides video signals and an Internet data input that provides overlay-enabling digital data over the Internet (col 6, ln 48-67). The video signals and overlay-enabling data come from different sources that are distinct and independent inputs (col 3, ln 39-64; Fig. 1). The overlay-enabling data includes at least a Web link, an image indicative of content associated with the overlay-enabling digital data and an overlay activation criterion (col 5, ln 29-44; col 7, ln 62-col 8, ln 15). The circuit further includes the steps of processing the overlay-enabling digital data to generate

Samsung
Ex. 1031 - Page 353

an overlay if a criterion is met, where the generation of the overlay includes generating a first display screen having a first portion corresponding to the video signals and an association of the Web link with the a second portion portion such that the content can be retrieved and displayed on a second display screen on the TV set . (col 5, ln 29-44; col 7, ln 62-col 8, ln 51; Fig. 7A-8)

Samsung
Ex. 1031 - Page 354

IV. Argument

A. Overview

This appeal is in response to a Final Office Action dated July 31, 2023 ("2023 July Final") and an Advisory Action dated November 7, 2023 ("2023 November AA"). Appellant filed an after-final response on September 28, 2023 ("2023 September Response"), responding to the 2023 July Final. The 2023 November AA was then issued in response to the 2023 September Response.

The 2023 July Final included rejections under 35 USC 251 and 35 USC 112, 2nd paragraph (pre-AIA). In response to the 2023 September Response, the rejections under 35 USC 251 were withdrawn as noted in the 2023 November AA.

The rejection under 35 USC 112, 2nd paragraph was maintained in the 2023 November AA and is the subject of the present appeal.

B. Rejection of claims 1-8, 10-19 and 21 under 35 USC 112, 2nd Paragraph

Claims 1-8, 10-19 and 21 have been rejected under 35 USC §112, 2nd paragraph for being indefinite for "the same reasons related to the "overlay activation criterion" limitation as discussed and determined by the District Court and affirmed by the CAFC." (2023 July Final, page 9). Appellant respectfully disagrees, especially in view of the cancellation of claims 9 and 20. In support Appellant notes the following:

1. Cancelling Claims 9 and 20 Resolves the Indefiniteness Issue of Claims 1 and 13 Because It Breaks the Link of Terminology Giving Rise to the Inconsistencies Leading to the Invalidity

As quoted by the Examiner, the rationale from the District Court and affirmed by the CAFC regarding the indefiniteness holding of claims 1 and 13 is as follows (page 9 of the 2023 July Final):

> With regards to the use of the term "overlay activation criterion", the Examiner notes that the District Court (see: Civil No. 18-10238 (RMB/KMW), Opinion (April 16, 2020)) determined that the term "'overlay activation criterion' ... neither of which are terms of art,

Samsung
Ex. 1031 - Page 355

nor defined by the specifications" is used in a manner "that is inconsistent with the use of that same term in dependent claims 9 and 20, and the specifications of both patents." Additionally, the District Court determined that "the intrinsic evidence presents a POSA with irreconcilably inconsistent information ... that 'overlay activation criterion' comes from the Internet and simultaneously not from the Internet ... Because the Court cannot construe the claims, they are indefinite." Similarly, the CAFC (see: TVnGO Ltd. v. LG Elecs. U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021)) highlighted the fact that there was a lack of intrinsic evidence as to the meaning of the term "overlay activation criterion" and pointed out that the term was not "mentioned, let alone defined, in the shared specification ... And the 'limited information' provided by the prosecution history isn't enough to provide certainty." Additionally, the CAFC also determined "one of ordinary skill would lack reasonably certainty as to the source of an 'overlay activation criterion' ... the intra-patent grounds discussed above are sufficient to establish indefiniteness ... The district court correctly concluded that the asserted claims are invalid for indefiniteness."

The DC's decision (affirmed by the CAFC) as discussed in the section quoted by the Examiner indicates that the indefiniteness of the claims is brought about an inconsistency created by the use of the term "overlay activation criterion" in independent claims 1 and 13 and then again in dependent claims 9 and 20. This inconsistency across the independent and dependent claims creates an uncertainty in the possible meaning of the claim, resulting in the indefiniteness of all of the claims.

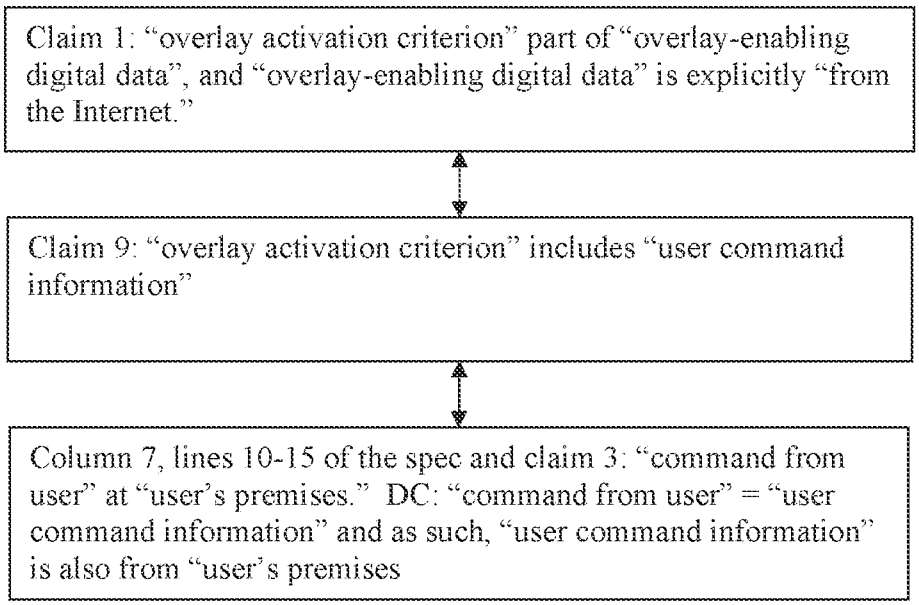
The DC determined that in "claims 1, and 13, 'overlay activation criterion' must necessarily come from the Internet because the claim states that 'overlay activation criterion' is a component of the 'overlay-enabling digital data' which data, the claim explicitly states, is provided 'over the Internet'". Thus, it is Appellant's understanding that the DC does not find an internal inconsistency within claim 1 and that as such, there is no uncertainty of the meaning of the terms of claim 1 in isolation – within claim 1, "overlay activation criterion" explicitly comes from the internet.

The inconsistency arises in dependent claims 9 and 20 because the DC found that the "user command information" may be a component of the "overlay activation criterion" and that

Samsung
Ex. 1031 - Page 356

the "user command information" comes from the user's premises. The DC arrived at this conclusion by equating the "user command information" of claims 9 and 20 with the "command from a user" of claim 3 and also column 7, lines 10-15 of the specification, which indicate that the "command from a user" is from "the user's premises."

Thus, visually, the link between the terminology that creates the discrepancy leading to the DC's finding of indefiniteness can be represented accordingly:



There is no direct link between the "overlay activation criterion" of claim 1 and the "command from the user" of claim 3 and the associated language of col 7, ln 10-15 in the specification. The link was created via the limitation of claim 9 and then the DC's linking of the "user command information" of claim 9 to the "command from user" of claim 3 and corresponding language of the col 7, ln 10-15.

Because the DC was clear that in claim 1, the "overlay activation criterion" unequivocally comes from the Internet and because there is no direct link from the recitation of the "overlay activation criterion" claim 1 to the "command from the user" of claim 3 or the corresponding language of column 7, lines 10-15, cancelling claim 9 is sufficient to break the link found by the DC between the "overlay activation criterion" and the "user command

Samsung
Ex. 1031 - Page 357

information" created via claim 9 and also the link found by the DC between the "user command information" of claim 9 and the language of column 7, lines 10-15 and the "command from the user" of claim 3. Therefore, the link between the recitation of "overlay activation criterion" coming from the Internet and the commands from a user coming from the user's premises of claim 3 and col 7, ln 10-15 of the specification is broken.

With the cancellation of claim 9, there is no other way to link a possible interpretation of the "overlay activation criterion" of claim 1 as coming "not from the Internet". Thus, with the cancellation of claim 9, the meaning of the term "overlay activation criterion" is consistent and thus definite. The arguments above also apply to the link between claims 13 and 20. A reissue patent without cancelled claims 9 and 20 would no longer have a source of confusion/inconsistency for the skilled artisan. Instead, the skilled artisan would only discover the meaning of "overlay activation criterion" as coming "from the Internet" of independent claims 1 and 13.

2. Cancelling Claims 9 and 20 Overcomes the Rejection under 35 USC 112, 2nd Paragraph Because There Would No Longer Be An Inconsistency In The Claims and The Prosecution History Would Similarly Make The Intended Interpretation of the Claims Clear

On page 10 of the 2023 July Final, the Examiner indicated that the rejections under 35 USC 112, 2nd paragraph would not be overcome by cancelling claims 9 and 20. The Examiner reasons that:

> Merely canceling dependent claims 9 and 20 does not eliminate this vital intrinsic evidence from the prosecution history, and thus a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. Canceling dependent claims 9 and 20 does not change that.

In the 2023 November AA, the Examiner maintains this point, indicating:

> Cancelling dependent claims 9 and 20 does not eliminate the vital intrinsic evidence (see: CAFC Decision, p. 10: "the intrinsic evidence presents ... irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously not from the Internet") from the prosecution history, and thus

Samsung
Ex. 1031 - Page 358

a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. That is to say, the intrinsic evidence of at least the prosecution history remains and it would still be a source of confusion/inconsistency for the skilled artisan.

Appellant respectfully disagrees. Cancelling claims effectively removes them from a reissued patent such that the link discussed that gives rise to the inconsistency and subsequently the indefiniteness no longer exists in the claim language for the skilled artisan to find.

On page 11 of the CAFC decision states:

> Further, merely dismissing the dependent claims as **invalid**, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of 'overlay activation criterion' in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in '[o]ther claims of the patent in question,' which 'can also be valuable sources of enlightenment as to the meaning of a claim term.' Phillips, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are **invalid** does not change that. (emphasis added)

Here, the CAFC only discusses the invalidity of the claims at issue and does not address cancellation. A court finding the claims invalid is not the same thing as cancelling claims during a USPTO proceeding. A court can declare patent claims invalid during a proceeding. A court does not have the power to cancel or amend patent claims.

In the reasoning offered by the CAFC on page 11, the CAFC explains that the independent claims cannot be found to be valid and definite while the dependent claims are indefinite (and thus invalid) because the inconsistency raised by the dependent claims carries back to the terminology of the independent claims. This is because, per the DC and CAFC, the dependent claims exist as a source of claim interpretation of terminology found in the independent claim.

Samsung
Ex. 1031 - Page 359

Thus, as long as the dependent claims are a part of the text of the patent, they remain a source of information for the interpretation of the independent claims. Unfortunately, this also means that, as long as the dependent claims remain a part of the text of the patent, the inconsistency also remains a part of the patent and the independent claims remain indefinite.

Cancelling claims, on the other hand, removes the text of the cancelled claim from the patent. After a claim is cancelled during prosecution, the issued patent (or reissued patent) is read as if the cancelled claim never existed. When a potential infringer reads an issued patent to determine whether their product or process infringes, they look at the issued claims and not the cancelled claims because the cancelled claims are not part of the patent.

As to the Examiner's assertion that even with the cancellation of claims, the skilled artisan would still find the inconsistency from the prosecution history, Appellant respectfully disagrees that the skill artisan would find the inconsistency or a lack of clarity from the **entirety** of the prosecution history.

In *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, the CAFC stated as follows in a case involving a reissued patent (emphasis added):

> Finally, the prosecution history (sometimes called "file wrapper and contents") of the patent consists of the entire record of proceedings in the Patent and Trademark Office. This includes all express representations made by or on behalf of the applicant to the examiner to induce a patent grant, or, as here, to reissue a patent. Such representations include amendments to the claims and arguments made to convince the examiner that the claimed invention meets the statutory requirements of novelty, utility, and nonobviousness. **Thus, the prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.** *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985)

Were this application proceed to a reissued patent, a person reading the prosecution history would have access to the entire prosecution history, including the 2023 September Response as well as this very document. Upon reading the reissued patent and prosecution

Samsung
Ex. 1031 - Page 360

history, the reader would not see cancelled claims 9 and 20 within the patent document itself. Therefore, there would be no confusion created by the text of the reissued patent document.

Further, when digging into the prosecution history, the reader would see that via the cancellation of claims 9 and 20, the Appellant intended to exclude the possibility that the claims could be interpreted to mean that the "overlay activation criterion" could come from the user's premises. To that point, Appellant restates the following (initially stated in the 2023 September Response), to remove any doubt:

> **Dear Reader of the Prosecution History: Claims 9 and 20 are cancelled herein because it is Applicant's/Appellant's intent to remove any possible interpretation of the "overlay activation criterion" as coming from the user's premises (i.e., not from the internet).**

Because the cancelled claims (in this case, claims 9 and 20) would not be part of the reissued patent and would not be available for a reader to read as a source of clarification or meaning within the patent text, and because the prosecution history would include a clear intent to remove the interpretation of "overlay activation criterion" that caused the inconsistency at the DC and CAFC levels, a reader of the patent and the prosecution history (including the reissue prosecution history) would not find the inconsistency within the claims to exist and would clearly understand the metes and bounds of the claims.

Appellant notes that while the 2023 November AA restates much of the Examiner's reasoning from the 2023 July Final, the 2023 November AA does not address Appellant's clarification of the terms (which is now part of the prosecution history) in the 2023 September Response (repeated in bold above).

In the 2023 November AA, the Examiner asserts that the CAFC decision addresses the Appellant's arguments, stating:

> Applicant's arguments as to the proper metes and bounds of independent claims 1 and 13 do not supersede one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" already in the record. In fact, this issue appears to have been generally addressed in the Decision by the CAFC (see: CAFC Decision, p. 10: "For its part, TVnGO

Samsung
Ex. 1031 - Page 361

asserts that an overlay activation criterion 'comes from the Internet,' ... This distinction lacks intrinsic support").

<first, this section is out of context – the distinction the CAFC is responding to is the one of user command versus user command information; second, intrinsic evidence includes prosecution history as per CAFC page 6, thus Appellant's arguments in the 2023 September Answer are part of the intrinsic evidence that would be available to a reader after the reissue patent issues.>

In "regular" patent prosecution practice, <state that there we can fix claims all the time without the concern that the prior versions of the patents would remain in the pros history>

<limited information provided by pros history didn't allow for reasonable certainty (CAFC page 8) – but now the prosecution history that includes the reissue application does -

<address advisory action>

3. Cancelling Claims 9 and 20 to Overcome the 35 USC 112, 2nd Paragraph Rejection Is Consistent With the DC and CAFC Rulings

Applicant recognizes that the Office (in this case, the Examiner and subsequently possibly the Patent Trial and Appeal Board ("PTAB")) is bound to follow the DC and CAFC decisions with regard to the rejection under 35 USC 112, 2nd paragraph and that the Examiner and/or the PTAB cannot directly reverse the decision of the DC or the CAFC. Put another way, Applicant sees that overturning the rejection under 35 USC 112, 2nd paragraph requires an approach that resolves the indefiniteness issues noted by the DC and affirmed by the CAFC while simultaneously remaining consistent with the holding. It is Applicant's position that cancelling claims 9 and 20 without amending the independent claims 1 and 13 (such that their scope remains unchanged) resolves the indefiniteness issue as explained above, and also is consistent with the DC and CAFC decision such that withdrawing the current rejection under 35 USC 112, 2nd paragraph does not result in the Examiner attempting to reverse the courts' decisions or usurp their authority.

Samsung
Ex. 1031 - Page 362

In reading the Examiner's rejection, Appellant interprets the arguments with an understanding that the Examiner is potentially interpreting the DC and CAFC decisions as deeming claims 9 and 20 necessary for the interpretation of the "overlay activation criterion" of claims 1 and 13 and that because of that, the DC and CAFC are in essence declaring that they cannot be cancelled or otherwise removed from the text of the patent. This understanding comes from page 10 of the 2023 July Final, where the Examiner states:

> The above rejection is not overcome by the cancelation of dependent claims 9 and 20. This issue appears to have been squarely addressed in the Decision by the CAFC (see: *TVnGO Ltd. v. LG Elecs.* U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021), p. 11: "merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of 'overlay activation criterion' in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in '[o]ther claims of the patent in question,' which 'can also be valuable sources of enlightenment as to the meaning of a claim term.' *Phillips*, 415 F.3d at 1314. Here, however, he or she would discover an inconsistency, throwing the meaning of 'overlay activation criterion' into doubt. These dependent claims are intrinsic evidence") and found unpersuasive. As noted by the CAFC, dependent claims 9 and 20 are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in the record. Merely canceling dependent claims 9 and 20 does not eliminate this vital intrinsic evidence from the prosecution history, and thus a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. Canceling dependent claims 9 and 20 does not change that.

Applicant respectfully disagrees and notes the following:

Applicant notes that the CAFC is not declaring that dependent claims cannot be cancelled to address the indefiniteness. The relevant section quoted by the Examiner is as follows:

> merely dismissing the dependent claims as invalid, as TVnGO proposes, ignores that they are one of the few sources of intrinsic evidence on the meaning of 'overlay activation criterion' in this record. When faced with this unknown and undefined phrase, a skilled artisan would look for clarification not only in the specification but also in '[o]ther claims of

Samsung
Ex. 1031 - Page 363

the patent in question,' which 'can also be valuable sources of enlightenment as to the meaning of a claim term.' Phillips, 415 F.3d at 1314

The Examiner further paraphrases the CAFC, indicating:

> As noted by the CAFC, dependent claims 9 and 20 are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in the record. Merely **canceling** dependent claims 9 and 20 does not eliminate this vital intrinsic evidence from the prosecution history, and thus a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. **Canceling** dependent claims 9 and 20 does not change that. (emphasis added)

However, the CAFC decision does not actually say anything about cancelling the claims. The actual text of the CAFC decision reads on page 11:

> Here, however, he or she would discover an inconsistency, throwing the meaning of "overlay activation criterion" into doubt. These dependent claims are intrinsic evidence. Arguing that they are **invalid** does not change that. (emphasis added)

Invalidating the claims at the trial level is not the same as cancelling claims during a USPTO proceeding or process (such as a reissue application prosecution or a disclaimer). When a claim is invalidated by a court, the document of the patent itself doesn't change. Actually changing the text of the patent can only be done via the avenues available through the USPTO.

Here, the CAFC is not stating that the claims cannot be cancelled. Instead, the CAFC is stating that, because the dependent claims remain in the text of the patent even if invalidated at the court level, it is not possible to leave the dependent claims as invalid for being indefinite while declaring the independent claims are valid. In other words, as long as the indefinite dependent claims remain in the text of the patent, then the independent claims must also be indefinite because the text of claims 9 and 20 help inform the reader of the possible meanings of the terms in claims 1 and 13, respectively. In the section of page 11 referenced by the Examiner, the CAFC is responding to an argument made by TVnGO on pages 5-6 of the Plaintiff's Brief In Response to the Court's March 6, 2020 Order ("Order").

Samsung
Ex. 1031 - Page 364

On pages 5-6 of the Order, TVnGO argued that a determination of invalidity of a dependent claim should not affect validity of an otherwise clear independent claim. The CAFC disagreed with this, with the reasoning set forth on page 11 of the CAFC decision. Nothing in this section of the CAFC decision or any other part of the CAFC decision (or the District Court decision, for that matter) indicates that the claims can't be cancelled or that the dependent claims **MUST** remain in the text of the patent. As noted above, this section only indicates that the dependent claims, as a source of potential claim interpretation, affect the interpretation of the terms of the independent claims. In this case, this means that the inconsistency that makes the dependent claims indefinite also renders the independent claims indefinite.

Because the CAFC and/or the DC never said the claims could not be cancelled, cancelling dependent claims 9 and 20 to remove the inconsistency and thus the indefiniteness of respective independent claims 1 and 13 does not contradict the DC or the CAFC decisions.

4. Scope Of Claims Not Enlarged Because Claims Are Fundamentally Unchanged

The independent claims 1 and 13 rejected in the 2023 July Final are substantially identical to those presented in this response and the minor differences do not change the claim scope from the rejected claims or from the scope of the claims on the patent. The Examiner appears to agree, stating on page 10 of the 2023 July Final that the "amended independent claims 1 and 13 at least maintain the identical scopes found indefinite by the District Court and affirmed by the CAFC."

In the 2023 July Final, the Examiner indicates that:

> If the Examiner agreed with Applicant that, "A reissue patent without those claims would no longer have a source of confusion/inconsistency ... the skilled artisan would only discover the meaning of 'overlay activation criterion' as coming 'from the Internet'," then the Examiner would be inclined to reintroduce the recently withdrawn rejections under 35 U.S.C. 251 related to claim scope broadening.

Applicant is confused as to how this hypothetical rejection could be rationally supported given that the Examiner recognizes that the scope of the current independent claims is identical to those of the claims rejected by the DC and affirmed by the CAFC. It is unclear how a claim

Samsung
Ex. 1031 - Page 365

could go from "identical scope" to "different scope" without touching the language of the claim itself. <address Adams arguments>

5. The Purpose of the Reissue Process is to Correct Deficient Patents, Including Indefiniteness Issues

Applicant asserts that the cancellation of claims 9 and 20 resolves the indefiniteness issue raised by the DC and the CAFC while remaining consistent with those decisions. As noted above and agreed upon by the Examiner, the scope of claims 1 and 13 has not changed.

If a claim whose scope has been unchanged can nevertheless be declared to have been improperly broadened, this seems to imply that an indefinite claim in a patent (or potentially indefinite in an unlitigated patent) that is over two years after issue can *never* be corrected via reissue because it will *always* be considered to be improperly broadened.

As stated by the court in *In re Altempohl*, 500 F.2d 1151 (Fed. Cir. 1974), "[i]n as much as 35 USC 251 is a remedial provision, which should be liberally construed, a patentee should be allowed to correct an error or ambiguity in a claim without having to rely on implication or litigation." (*Altempohl* at 1156-1157). To effectively render any indefiniteness issue unrecoverable for patents after two years of issue would run counter to the court-recognized remedial nature of the reissue process.

However, courts have shown that this is not the intent. In *Slimfold Mfg. Co v Kinkead Props.* 626 F.Supp 493 (1956), correcting an antecedent basis issue during reissue does not meaningfully change the scope of the claim. (*Slimfold* at 497-498). *Slimfold* cites to *In re Altempohl*, 500 F.2d 1151 (Fed. Cir. 1974), which states that "[l]ack of antecedent basis in a claim could render it invalid under 35 USC 112, second paragraph, and correction of such a defect by reissue should not have to depend on difference in scope of the claim." (*Altempohl* at 1156). To effectively render any indefiniteness issue unrecoverable would run counter to the court-recognized remedial nature of the reissue process.

Samsung
Ex. 1031 - Page 366

While the issue raised by the DC and CAFC in this situation is not an antecedent basis issue, these holdings show that courts have ruled on the possibility of using reissue to correct issues that could give rise to indefiniteness – especially where the scope of the claim on its face is fundamentally unchanged. Here, the scope of the independent claims is unchanged and as such this is one such case where a holding of indefiniteness should be correctable via reissue, which is in line with the whole purpose of the reissue process and consistent with court decisions that make such a correction permissible.

C. Request for Reversal

For the reasons discussed above, it is Appellant's position that claims 1 and 13 are definite under 35 USC 112, 2nd paragraph. Appellant respectfully requests reversal of the Examiner's rejections.

Respectfully submitted,

/Tomas A Prieto/
Tomas A. Prieto
Reg. No. 60,675
Representative for Appellant

Fish IP Law, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 94612
Telephone (949) 943-8300
Fax (949) 943-8358
email: tprieto@fishiplaw.com

Samsung
Ex. 1031 - Page 367

V. Claims Appendix

1. A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising:

(a) providing a combiner circuit at the user's premises, wherein:

the combiner circuit is coupled to a TV set and connected to a separate TV [timer]tuner box or TV tuner in the TV set, at the user's premises, and

the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the separate TV tuner box or the TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored,

an image indicative of the content associated with said overlay-enabling digital data, and

an overlay activation criterion; and

(b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said overlay activation criterion is met, wherein generating [an] the overlay includes:

Samsung
Ex. 1031 - Page 368

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

2. The method according to claim 1, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user profile.

3. The method according to claim 1, further including: receiving a command from [a] the user at said user premises; and responsive to said command, resizing said first portion and/or said second portion of said first display screen.

4. The method according to claim 1, wherein the content stored at said website enables streaming of digital data over the Internet; and

said method further including: pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

5. The method according to claim 1, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein said generating [an] the overlay further includes within said first display said one or more second images.

Samsung
Ex. 1031 - Page 369

6. The method according to claim 1, wherein the overlay-enabling digital data is supplementary or complementary to the video signals.

7. The method according to claim 1, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

8. The method according to claim 1, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

9. (Cancelled)

10. The method according to claim 5, further including:

periodically accessing a web server for downloading said overlay-enabling digital data;

extracting from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieving and storing digital content from said web sites; and

if the overlay activation criterion is met and a user command that is associated with an image from amongst said one or more second images is identified, displaying the respective image from amongst the second images, accessing the respective web site associated with the displayed image and extracting and buffering content from the website.

11. The method according to claim 5, further comprising displaying a respective IP content when a corresponding one of said one or more second images is selected.

Samsung
Ex. 1031 - Page 370

12. The method according to claim 7, including selecting specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

13. A TV-Internet Integration circuit for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the TV-Internet Integration circuit comprising:

a combiner circuit at [a] the user's premises coupled to a separate TV tuner box or TV tuner,

wherein the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the combiner circuit at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored;

an image indicative of the content associated with said overlay-enabling digital data; and

an overlay activation criterion, wherein

the combiner circuit is responsive to [an]the overlay activation criterion being met for generating a corresponding overlay, including:

Samsung
Ex. 1031 - Page 371

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, and generate a second video display screen including at least a portion which corresponds to said content; and

a video output interface, coupled to or integrated within the combiner circuit and configured to be coupled to a video input of said TV set and to display said first display screen or said second video display screen.

14. The TV-Internet Integration circuit according to claim 13, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user-profile.

15. The TV-Internet Integration circuit according to claim 13, further including:

a command input for receiving a command from [a] the user at said user premises; and

a frame adjuster for resizing said first portion and/or said second portion of said first display screen in response to said command.

16. The TV-Internet Integration circuit according to claim 13, further including:

a receiver for receiving a digital data stream, wherein the stream of the digital data is enabled by the content stored at said website; and

a processing unit for pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

Samsung
Ex. 1031 - Page 372

17. The TV-internet Integration circuit according to claim 13, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and

wherein the combiner circuit is configured to:

periodically access a web server for downloading said overlay-enabling digital data;

extract from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieve and store digital content from said web sites; and

if the overlay activation criterion is met, and a user command that is associated with an image from amongst said one or more second images is identified, display the respective image from amongst the second images, access the respective web site associated with the displayed image and extract and buffer content from the website.

18. The TV-Internet Integration circuit according to claim 13, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

19. The TV-Internet Integration circuit according to claim 13, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

20. (Cancelled)

Samsung
Ex. 1031 - Page 373

21. The TV-Internet Integration circuit according to claim 18, wherein the icon is colored so as to allow user selection of a specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

Samsung
Ex. 1031 - Page 374

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	**01/03/2024 02:36:38 PM Z ET**	**103692.0001US4re**

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Robert Fish
PATENT CENTER #	63823396	FILING DATE	07/18/2022
CUSTOMER #	24392	FIRST NAMED INVENTOR	Yakkov MERLIN
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	-

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Appeal_Brief-01f_2023-12-20_TVnGO_1US4re_flat.pdf	25	Appeal Brief Filed	186 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
Appeal_Brief-01f_2023-12-20_TVnGO_1US4re_flat.pdf	00DD54DBE755BBD35DBB976CAFC4C7D59CD401231C67CCBD6ADDA1F64620ED0D154D76F08B48ACACCDD7E51C9342B66B7C144FD18584BF35C67EDB61E97D58B4

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized

by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 04/19/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
04/19/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com
eofficeaction@appcoll.com

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Application Number: 17/867,612
Filing Date: 18 Jul 2022
Appellant(s): TVNGO LTD. (BVI)

Tomas A. Prieto (Reg. No. 60,675)
For Appellant

EXAMINER'S ANSWER

This is in response to the Appeal Brief filed 01/03/2024 appealing from the Final Action mailed 07/31/2023 and the Advisory Action mailed 11/07/2023.

(1) Grounds of Rejection to be Reviewed on Appeal

Every ground of rejection set forth in the Advisory Action dated 11/07/2023 from which the Appeal is taken is being maintained by the Examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

The following ground(s) of rejection are applicable to the appealed claims:

I. Claims 1-8, 10-19, and 21 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention (see: Final Action, pp. 8-11; and Advisory Action, Continuation Sheets 1-3).

(2) Response to Argument

Appellant's arguments filed 01/03/2024 have been fully considered but they are not persuasive.

1. Cancelling Claims 9 And 20 Resolves the Indefiniteness Issue Of Claims 1 And 13

The Appellant argues (Appeal Brief: pp. 6-9) that it is their understanding that the DC does not find an internal inconsistency within claim 1 and that as such, there is no uncertainty of the meaning of the terms of claim 1 in isolation. Appellant notes that it is also their understanding that claims 1 and 13 in isolation would be definite because the inconsistency (and thus indefiniteness) arises with dependent claims 9 and 20. Therefore, Appellant argues

cancelling claim 9 is sufficient to break the link found by the DC between the "overlay activation criterion" and the "user command information" created via claim 9. Finally, Appellant argues that with the cancellation of claim 9, there is no other way to link a possible interpretation of the "overlay activation criterion" of claim 1 as coming "not from the Internet" and thus the meaning of the term "overlay activation criterion" is consistent and definite. Consequently, Appellant notes that a skilled artisan would only discover the meaning of "overlay activation criterion" as coming "from the Internet" of independent claims 1 and 13.

The Examiner respectfully disagrees with the Appellant.

First, as acknowledged by Appellant, amended independent claims 1 and 13 at least maintain the virtually identical scope as their corresponding claims in the Merlin '969 patent which were determined to be invalid for indefiniteness by that District Court (see: Civil No. 18-10238 (RMB/KMW), Opinion (April 16, 2020)). That determination by the District Court was then affirmed by the CAFC (see: *TVnGO Ltd. v. LG Elecs. U.S.*, No. 2020-1837 (Fed. Cir. Jun. 28, 2021)). Therefore, amended independent claims 1 and 13 each still recite, "wherein said overly-enabling digital data includes...an overlay activation criterion" (emphasis added).

Second, the Examiner notes that cancelling dependent claims 9 and 20 does not resolve the indefiniteness issue of independent claims 1 and 13. The term "overlay activation criterion", as noted above, is still recited in each of independent claims 1 and 13, and it is the use of this term, in view of the intrinsic evidence (e.g., the claims, written description, prosecution history, etc.) on the meaning of said term in the record, that fails to inform a person of ordinary skill in the art of the claimed invention's scope with reasonable certainty. That is to say, independent claims 1 and 13 are not only viewed in isolation as suggested by Appellant.

The CAFC noted that, "neither 'overlay activation criterion'...has an ordinary meaning in the art...The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification...the 'limited information' provided by the prosecution history isn't enough to provide reasonable certainty here...This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies" (see: CAFC Decision, pp. 7-8). As further noted by the CAFC, "overlay activation criterion" is an unknown and undefined phrase, and dependent claims 9 and 20 are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" on the record. Therefore, cancelling dependent claims 9 and 20 does not eliminate this vital intrinsic evidence (see: CAFC Decision, p. 10: "the intrinsic evidence presents...irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet")(underline emphasis added) from the prosecution history, and thus a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. That is to say, the intrinsic evidence of at least the prosecution history remains and it would still be a source of confusion/inconsistency for the skilled artisan.

Finally, the Examiner notes that cancelling dependent claims 9 and 20 is not sufficient to break the link between the "overlay activation criterion" and the "user command information." More specifically, even if dependent claims 9 and 20 were cancelled, a cancelled claim is not removed from the prosecution history and is consequently available for use in construing the remaining claims of the patent. Cancelled dependent claims can be used to construe an independent claim because the dependent claims are included in the prosecution history, which becomes a part of the public record demonstrating Appellant/Patent Owner's understanding of its

own claim terms. Thus, as noted above, a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt.

While not a necessary requirement, the above is especially true in reissue applications. If a reissue patent was issued from the instant reissue proceeding with dependent claims 9 and 20 cancelled, said claims would not vanish from the published reissue patent as intimated by Appellant. Rather, the entirety of cancelled dependent claims 9 and 20 would merely be printed in the newly published reissue patent surrounded by brackets (e.g., see: MPEP 1453(IV)) to indicate their deletion.

2. Cancelling Claims 9 And 20 In View Of The Rejection Under 35 U.S.C. 112 (pre-AIA), Second Paragraph

The Appellant generally argues (Appeal Brief: pp. 9-13) that cancelling dependent claims 9 and 20 effectively removes them from a reissued patent such that the link discussed that gives rise to the inconsistency and subsequently the indefiniteness no longer exists for the skilled artisan to find. Appellant argues that after a claim is canceled during prosecution, the issued patent (or reissued patent) is read as if the cancelled claim never existed.

The Appellant further argues that if this application were to proceed to a reissued patent, a person reading the prosecution history would have access to the entire prosecution history and the reader would not see cancelled claims 9 and 20 within the patent document itself. Thus, Appellant argues that there would be no confusion created by the text of the reissued patent document, and a reader of the patent and the entire prosecution history would not find the inconsistency within the claims to exist and would clearly understand the metes and bounds of the claims. To buttress this point, the Appellant appears to attempt to affirmatively disclaim/disavow claim scope related to the "overlay activation criterion" limitation in the instant

reissue prosecution history. Appellant additionally notes that the Advisory Action does not address Appellant's clarification of the terms.

The Examiner respectfully disagrees with the Appellant.

The Examiner notes that the use of "overlay activation criterion" in dependent claims 9 and 20 in a way that contradicts the use of "overlay activation criterion" in the independent claims prevents reasonable certainty. As pointed out by the CAFC, "one of ordinary skill would lack reasonable certainty as to the source of an 'overlay activation criterion' – whether the internet or a user's premises" (see: CAFC Decision, p. 10). And as noted above, dependent claims 9 and 20 are one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" in the record. That is to say, "neither 'overlay activation criterion'...has an ordinary meaning in the art...The patent record is also unhelpful. Neither phrase is mentioned, let alone defined, in the shared specification...the 'limited information' provided by the prosecution history isn't enough to provide reasonable certainty here...This dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies" (see: CAFC Decision, pp. 7-8).

Even if dependent claims 9 and 20 were cancelled, a cancelled claim is not removed from the prosecution history and is consequently available for use in construing the remaining claims of the patent. Cancelled dependent claims can be used to construe an independent claim because the dependent claims are included in the prosecution history, which becomes a part of the public record demonstrating Appellant/Patent Owner's understanding of its own claim terms. Thus, as noted above, a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt.

And the Appellant is incorrect regarding what a reader would see if this application were to proceed to a reissued patent. The reader would explicitly see cancelled claims 9 and 20 within the patent document itself. As noted above, if a reissue patent was issued from the instant reissue proceeding with dependent claims 9 and 20 cancelled, said claims would not vanish from the published reissue patent as intimated by Appellant. Rather, the entirety of cancelled dependent claims 9 and 20 would merely be printed in the newly published reissue patent surrounded by brackets (e.g., see: MPEP 1453(IV)) to indicate their deletion.

Appellant's arguments as to the proper metes and bounds of independent claims 1 and 13 do not supersede one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" already in the record. In fact, this issue appears to have been generally addressed in the Decision by the CAFC (see: CAFC Decision, p. 10: "For its part, TVnGO asserts that an overlay activation criterion 'comes from the Internet,'...This distinction lacks intrinsic support"). Here, the CAFC acknowledged that Patent Owner affirmatively asserted that an overlay activation criterion "comes from the Internet", which is similar to Appellant's current clarification of the terms, and determined, in light of comparing user commands and user command information, that the distinction lacks intrinsic support. Thus, despite Patent Owner's assertions, the CAFC determined that "one or ordinary skill in the art would lack reasonable certainty as to the source of an 'overlay activation criterion'."

> **Dear Reader of the Prosecution History: Claims 9 and 20 are cancelled herein because it is Applicant's/Appellant's intent to remove any possible interpretation of the "overlay activation criterion" as coming from the user's premises (i.e., not from the internet).**

Additionally, Appellant's above statement disclaiming/disavowing claim scope related to the "overlay activation criterion" limitation cannot override the claim language itself, which controls the bounds of the claim, and the intrinsic evidence already in the record. Further, Appellant's

above statement (i.e., prosecution disclaimer) disclaiming/disavowing claim scope related to the "overlay activation criterion" limitation is not binding on the Office in the instant reissue proceeding. The current prosecution history before the Office is in development and not fixed during examination (e.g., see: MPEP 2173.02(I)).

3. Cancelling Claims 9 And 20 In View Of The DC And CAFC Rulings

The Appellant generally argues (Appeal Brief: pp. 13-16) that the CAFC is not declaring that dependent claims cannot be cancelled to address the indefiniteness. More specifically, the Appellant points out that the CAFC decision does not actually say anything about cancelling the claims and notes that invalidating the claims at the trial level is not the same as cancelling the claims during a USPTO proceeding or process (such as a reissue application prosecution or a disclaimer). Appellant further argues that the CAFC is stating that as long as the indefinite dependent claims remain in the text of the patent, then the independent claims must also be indefinite because the text of claims 9 and 20 help inform the reader of the possible meanings of the terms in claims 1 and 13, respectively. Thus, Appellant argues that cancelling dependent claims 9 and 20 does not contradict the DC or the CAFC decisions.

The Examiner both agrees and disagrees with the Appellant.

First, the Examiner notes that a final holding of claim invalidity or unenforceability (after all appeals) is binding/controlling on the Office. Here, amended independent claims 1 and 13 at least maintain the virtually identical scope as found indefinite by the District Court and affirmed by the CAFC. Aside from Appellant arguments, independent claims 1 and 13 have not been

amended in a substantive way and there has not been a sufficient showing of facts not previously considered in the record.

Second, to be clear, the Examiner is not saying that dependent claims 9 and 20 cannot be cancelled or otherwise removed from the text of the Merlin '969 patent. And the Examiner agrees that the CAFC decision does not say anything about cancelling the claims. Likewise, it is also noted that the CAFC made no determination on whether or not independent claims 1 and 13 would be deemed definite if dependent claims 9 and 20 were cancelled from the Merlin '969 patent. The Examiner appreciates the distinction between invalidating claims at the trial level and cancelling claims during a USPTO proceeding. However, as discussed above, cancelling or otherwise removing dependent claims 9 and 20 from the text of the Merlin '969 patent would not overcome the indefiniteness rejection under 35 U.S.C. 112 (pre-AIA), second paragraph.

It is noted that the referenced arguments by TVnGO appeared to hinge on the idea that the "scope of the independent claim whose meaning is clear on its face" or "[W]here the scope of the independent claim is clear." However, as determined by the CAFC, when all the intrinsic evidence is properly evaluated the scope of independent claims 1 and 13 is not clear and thus the claims are invalid for indefiniteness.

4. Scope Of The Claims

The Appellant generally argues (Appeal Brief: pp. 16-17) that the scope of the claims is not enlarged because the claims are fundamentally unchanged. More specifically, Appellant notes that independent claims 1 and 13, as currently presented, are substantially identical to those issued in the Merlin '969 patent and the minor differences do not change the scope from the claims in the Merlin '969 patent. Finally, Appellant expresses confusion as to how a

hypothetical rejection related to claim scope broadening could be rationally supported given that the Examiner recognizes that the scope of the current independent claims is identical to those of the claims rejected by the DC and affirmed by the CAFC.

The Examiner both agrees and disagrees with the Appellant.

First, similar to the above discussion, the Examiner agrees that amended independent claims 1 and 13 at least maintain virtually identical scope as their corresponding claims in the Merlin '969 patent that were found indefinite by the District Court and affirmed by the CAFC. Therefore, the scope of amended independent claims 1 and 13 are not enlarged because said claims are fundamentally unchanged. That is to say, amended independent claims 1 and 13 still present irreconcilable inconsistencies (i.e., the "overlay activation criterion" indicating that it comes from the Internet and simultaneously not from the Internet (i.e., from a user's premises)) that render their precise meanings not reasonably certain.

Second, in the hope of alleviating confusion and making the record clearer, the Examiner will further clarify the cited statement from the Final Action. The Examiner's position is that if the Appellant were correct, based on Appellant's general argument (i.e., "A reissue patent without cancelled claims 9 and 20 would no longer have a source of confusion/inconsistency…the skilled artisan would only discover the meaning of 'overlay activation criterion' as coming 'from the Internet'…intended to exclude the possibility that the claims could be interpreted to mean that the 'overlay activation criterion' could come from the user's premises") and the cancelling of dependent claims 9 and 20, then the scope of amended independent claims 1 and 13 would indeed be changed. In that case, independent claims 1 and

13 found indefinite by the District Court, and subsequently affirmed as indefinite by the CAFC, would now be definite in light of the disclosure of the Merlin '969 patent.

However, as previously noted (e.g., see: (1) Non-Final Action, pp. 4-5 in 17/867,612 and (2) Final Action, pp. 4-6 in related 17/714,917 – citing *Ex parte Adams*, Appeal 2007-0441 (March 14, 2007)), this would be considered an enlarging of the scope of the claims (e.g., see: MPEP 1412.03(I) - "For example, if any amended or newly added claim in the reissue contains within its scope any conceivable product or process which would not have infringed the patent, then that reissue claim would be broader than the patent claims...A claim which covers something that the original claims do not is a broadened claim. A claim would be considered a broadening claim if the patent owner would be able to sue any party for infringement who previously could not have been sued for infringement") of the Merlin '969 patent which would be improper since the instant reissue application was filed more than two years after the Merlin '969 patent issued. At the simplest level, the scope of amended independent claims 1 and 13 would be considered enlarged because (1) the "overlay activation criterion" limitation would be limited to only coming "from the Internet" instead of coming "from the Internet" and simultaneously "not from the Internet" (i.e., the scope going from A + not A to merely A)(e.g., see: CAFC Decision, p. 10: "the intrinsic evidence presents…irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet") and (2) their claim scope would go from indefinite (see above) to definite and thus said claims would cover something that the original claims did not (e.g., the Patent Owner would now be able to sue parties for infringement who previously could not have been sued for infringement).

It is noted that in the Final Action the Examiner withdrew the relevant rejection of all claims under 35 U.S.C. 251 for improper claim broadening because the Examiner generally agreed with Appellant that the scope of amended independent claims 1 and 13 is at least identical to the scope of their corresponding claims in the Merlin '969 patent. In light of that determination of claim scope, it would have been improper to maintain that relevant rejection under 35 U.S.C. 251 related to claim scope broadening. Thus, while there is no current rejection under 35 U.S.C. 251 for improper claim broadening, the Examiner would appreciate the Board's commentary on this hypothetical issue. That is to say, if the Board ultimately agrees with the Appellant that the rejection under 35 U.S.C. 112 (pre-AIA), second paragraph, is improper and should be withdrawn, would the now definite claims, in light of the claim scope fact pattern discussed above, be considered improper claim broadening in view of the previously cited informative PTAB decision (see: *Ex parte Adams*, Appeal 2007-0441 (March 14, 2007))? It is the Examiner's belief that addressing this hypothetical issue would be beneficial to the both the Examiner and the Appellant, and would lead to improved compact prosecution upon the Board's forthcoming decision.

Third, the Examiner notes that disclaiming/disavowing claim scope (i.e., altering claim scope) related to the "overlay activation criterion" limitation without substantively amending the language of independent claims 1 and 13 appears to be precisely what Appellant is attempting to accomplish in the instant reissue application. That is to say, Appellant attempts to exclude the possibility that the claims could be interpreted to mean that the "overlay activation criterion" could come from a user's premises by providing the following statement disclaiming/disavowing claim scope related to the "overlay activation criterion" limitation:

> Dear Reader of the Prosecution History: Claims 9 and 20 are cancelled herein because it is Applicant's/Appellant's intent to remove any possible interpretation of the "overlay activation criterion" as coming from the user's premises (i.e., not from the internet).

As noted above, said statement is not binding on the Office in the instant reissue proceeding.

5. The Purpose Of The Reissue Process

The Appellant generally argues (Appeal Brief: pp. 17-18) that while the issue raised by the DC and CAFC in this situation is not an antecedent basis issue, the courts have ruled on the possibility of using reissue to correct issues that could give rise to indefiniteness. Therefore, Appellant further argues that because the scope of the independent claims is fundamentally unchanged, a holding of indefiniteness should be correctable via reissue, which is in line with the whole purpose of the reissue process.

The Examiner both agrees and disagrees with the Appellant.

The Examiner initially agrees, as discussed above, that amended independent claims 1 and 13 at least maintain virtually identical scope as their corresponding claims in the Merlin '969 patent that were found indefinite by the District Court and affirmed by the CAFC. Therefore, while it does not resolve the indefiniteness rejection under 35 U.S.C. 112 (pre-AIA), second paragraph, the cancellation of dependent 9 and 20 is not precluded in the instant reissue application. Additionally, the Examiner acknowledges that certain simple amendments to claims 1, 3, 5, 13, and 15 "to address any apparent defects as to antecedent basis" (see: Remarks/Arguments: p. 11 - filed 09/28/2023) have been successfully entered in the instant reissue proceeding which "cure any defects as to antecedent basis that may exist" (see: Remarks/Arguments: p. 11 - filed 09/28/2023).

However, as previously noted, changing the meaning of "overlay activation criterion" to only come "from the Internet" would not be simply correcting an antecedent basis issue that does not meaningfully change the scope of the claims. In fact, as recognized by Appellant, this situation is not a basic antecedent basis issue. And while the reissue process allows for a vast array of errors to be corrected in a patent (see: MPEP 1402), the Examiner notes that 35 U.S.C. 251 imposes strict limits (see: MPEP 1412.03) related to a "broadened reissue claim" when a reissue application is filed after two years from the grant of the original patent (e.g., see: Informative Decision - *Ex parte Adams*, Appeal 2007-0441 (March 14, 2007) which is related to attempting to change indefinite patent claims with substantially similar "irreconcilable inconsistencies" in a reissue application filed more than two years after the patent issued). Unfortunately for Appellant, the instant reissue application was filed more than two years after the Merlin '969 patent issued. Thus, Appellant's options in the instant reissue proceeding are strictly limited.

Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/ADAM L BASEHOAR/
Primary Examiner, Art Unit 3992

Conferees:

/JOSHUA D CAMPBELL/
Primary Examiner, Art Unit 3992

/ALEXANDER J KOSOWSKI/
Supervisory Patent Examiner, Art Unit 3992

Requirement to pay appeal forwarding fee. In order to avoid dismissal of the instant appeal in any application or ex parte reexamination proceeding, 37 CFR 41.45 requires payment of an appeal forwarding fee within the time permitted by 37 CFR 41.45(a), unless appellant had timely paid the fee for filing a brief required by 37 CFR 41.20(b) in effect on March 18, 2013.

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC PAYMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	06/20/2024 04:09:37 PM Z ET	103692.0001US4re

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Robert Fish
PATENT CENTER #	66049899	AUTHORIZED BY	-
CUSTOMER #	24392	FILING DATE	07/18/2022
CORRESPONDENCE ADDRESS	-	FIRST NAMED INVENTOR	Yakkov MERLIN

Payment Information

PAYMENT METHOD	PAYMENT TRANSACTION ID	PAYMENT AUTHORIZED BY
DA / 500341	E20246JG11098305	Robert Fish

PRE-AUTHORIZED ACCOUNT	PRE-AUTHORIZED CATEGORY
500341	37 CFR 1.16 (National application filing, search, and examination fees); 37 CFR 1.17 (Patent application and reexamination processing fees); 37 CFR 1.19 (Document supply fees); 37 CFR 1.20 (Post Issuance fees); 37 CFR 1.21 (Miscellaneous fees and charges)

FEE CODE	DESCRIPTION	ITEM PRICE($)	QUANTITY	ITEM TOTAL($)
2403	REQUEST FOR ORAL HEARING	544.00	1	544.00
2413	FORWARDING AN APPEAL IN AN APPLICATION OR EX PARTE REEXAMINATION PROCEEDING TO THE BOARD	944.00	1	944.00
			TOTAL AMOUNT:	$1,488.00

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc Code: WFEE.APPEAL
Doc Description: Certification and Transmittal of Appeal Forwarding Fee

PTO/AIA/34 (11-23)

CERTIFICATION AND TRANSMITTAL OF APPEAL FORWARDING FEE	Docket Number (Optional) 103692.0001US4re

I hereby certify that this correspondence is transmitted by the USPTO patent electronic filing system or by facsimile, or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, on Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on June 20, 2024.

Signature /Tomas A. Prieto/

Typed or printed name Tomas A. Prieto

First Named Inventor: Yakkov Merlin	
Application Number: 17/867612	Filed: July 18, 2022
For:	
Art Unit: 3992	Examiner: Adam L. Basehoar

37 CFR 41.45 specifies that, in order to avoid dismissal of the appeal, appellant must pay the fee set in 37 CFR 41.20(b)(4) within two months of the later of the date of either the examiner's answer, or a decision refusing to grant a petition under 37 CFR 1.181 to designate a new ground of rejection in an examiner's answer.

The undersigned certifies that the appropriate fee accompanies this transmittal.

The fee for forwarding this appeal is (37 CFR 41.20(b)(4)) $ 2360.00

☒ Appellant asserts small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by 60%, and the resulting fee is: $ 944.00

☐ Appellant certifies micro entity status. See 37 CFR 1.29. Therefore, the fee shown above is reduced by 80%, and the resulting fee is: $ _____
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 500341.

☒ Payment made via USPTO patent electronic filing system.

Extensions of time under 37 CFR 1.136(a) for patent applications are not applicable to the time period set forth in this 37 CFR 41.45. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for *ex parte* reexamination proceedings.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ appellant

☒ attorney or agent of record Registration number 60675

☐ attorney or agent acting under 37 CFR 1.34 Registration number _____

Signature /Tomas A. Prieto/

Typed or printed name Tomas A. Prieto

Telephone Number 949-943-8329

Date June 20, 2024

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☒ * Total of 1 forms are submitted.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. The United States Patent and Trademark Office (USPTO) collects the information in this record under authority of 35 U.S.C. 2. The USPTO's system of records is used to manage all applicant and owner information including name, citizenship, residence, post office address, and other information with respect to inventors and their legal representatives pertaining to the applicant's/owner's activities in connection with the invention for which a patent is sought or has been granted. The applicable Privacy Act System of Records Notice for the information collected in this form is COMMERCE/PAT-TM-7 Patent Application Files, available in the Federal Register at 78 FR 19243 (March 29, 2013). https://www.govinfo.gov/content/pkg/FR-2013-03-29/pdf/2013-07341.pdf

Routine uses of the information in this record may include disclosure to:

1) law enforcement, in the event that the system of records indicates a violation or potential violation of law;

2) a federal, state, local, or international agency, in response to its request;

3) a contractor of the USPTO having need for the information in order to perform a contract;

4) the Department of Justice for determination of whether the Freedom of Information Act (FOIA) requires disclosure of the record;

5) a Member of Congress submitting a request involving an individual to whom the record pertains, when the individual has requested the Member's assistance with respect to the subject matter of the record;

6) a court, magistrate, or administrative tribunal, in the course of presenting evidence, including disclosures to opposing counsel in the course of settlement negotiations;

7) the Administrator, General Services Administration (GSA), or their designee, during an inspection of records conducted by GSA under authority of 44 U.S.C. 2904 and 2906, in accordance with the GSA regulations and any other relevant (i.e., GSA or Commerce) directive, where such disclosure shall not be used to make determinations about individuals;

8) another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c));

9) the Office of Personnel Management (OPM) for personnel research purposes; and

10) the Office of Management and Budget (OMB) for legislative coordination and clearance.

If you do not furnish the information requested on this form, the USPTO may not be able to process and/or examine your submission, which may result in termination of proceedings, abandonment of the application, and/or expiration of the patent.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl No.:	**17/867,612**
Appellant:	**TVnGO Ltd. (BVI)**
Filing Date:	**July 18, 2022**
Art Unit:	**3992**
Examiner:	**Basehoar, Adam L.**
Attorney Docket No.:	**103692.0001US4re**
Title	**FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

MS Appeal Brief - Patents
Commissioner of Patents and Trademarks
Washington, D.C. 20231
Attention: Patent Trial And Appeals Board

APPELLANT'S REPLY BRIEF UNDER 37 CFR §41.41

This brief is filed in response to the Examiner's Answer dated April 19, 2024 ("2024 April Answer").

I. Update To Related Appeals

Patent US 9,407,969 ("the '969 Patent") was the subject of litigation in the District of New Jersey as well as an appeal to the Federal Circuit. Orders from both courts rendered claims 1, 9, 10, 13, 17, and 20 of the '969 Patent invalid as indefinite. The District of New Jersey matter is Civil No. 18-10238 (RMB/KMW). The Federal Circuit matter is Case 20-1837.

Patent US 8,132,220 ("the '220 Patent"), owned by the same Assignee, was also the subject of the same litigation. Orders from both courts rendered claims 1, 9, 10, 13, 17, and 20 of the '220 Patent invalid as indefinite. Reissue application 17/714,917 ("the '917 Application") was filed for the '220 Patent, and a Notice of Appeal was filed on reissue application 17/714,917 on August 31, 2023.

Samsung
Ex. 1031 - Page 397

In the time since the Appeal Brief was filed in this application, the '917 application was withdrawn from appeal via the filing of an RCE. Thus, this reissue application is currently the only one of the patent family in front of the Board.

II. Summary of Applicant's Arguments

Generally speaking, there are two principal issues facing the Appellant and the Examiner that are before the Board:

(1) whether cancellation of dependent claims 9 and 20 overcomes the Examiner's current rejections under 35 USC 112, 2nd paragraph (which is based on the DC and CAFC determinations of indefiniteness); and

(2) whether overcoming the rejection under 35 USC 112, 2nd paragraph results in a broadening of the scope of the independent claims 1 and 13.

In an effort to ease of understanding of the issues, and in advance of a requested oral hearing, the following is a brief summary of the arguments set forth in the Appellant's Appeal Brief filed January 3, 2024 ("2024 Brief").

1. Rejection Under 35 USC 112, 2nd Paragraph

A) The District Court ("DC") did not find independent claims 1 and 13 to be internally inconsistent by themselves. Instead, the DC found independent claims 1 and 13 to be indefinite only by considering claims 1 and 13 in combination with respective dependent claims 9 and 20, and in reliance on its interpretation that "command from user" in the specification equates to the claimed "user command information" of claims 9 and 20.

B) Because the DC's conclusion of indefiniteness of claims 1 and 13 in (A) above depends on an interpretation of the claim language of dependent claims 9 and 20 by reference back to the specification, the cancellation of claims 9 and 20 removes the inconsistency from the claim set.

C) In addition to (B) above, the intrinsic evidence of the complete prosecution history, which would include the prosecution history of this reissue application, makes clear to a reader

Samsung
Ex. 1031 - Page 398

that the intended interpretation of the remaining claims does **not** include the "overlay activation criterion" coming from the user's premises, which limitation was in the canceled claims.

D) Thus, the cancellation of claims 9 and 20, in view of clarification provided by the prosecution history, resolves the inconsistency found by the DC and affirmed by the Court of Appeals for the Federal Circuit ("CAFC"), and thus overcomes the rejection of the remaining claims under 35 USC 112, 2nd paragraph.

E) Cancelling claims 9 and 20 to overcome the rejections under 35 USC 112, 2nd paragraph does not contradict the DC and CAFC rulings because a reversal by the Board and/or a withdrawal of the rejection under 35 USC 112, 2nd paragraph would be made under a new set of circumstances that the DC and CAFC did not consider (i.e., the cancellation of claims 9 and 20 and Appellant's arguments).

2. Scope of the Claims, and Potential Rejection under 35 USC 251

F) The parties agree that the scope of independent claims 1 and 13 are unchanged from those of the '969 patent. As such, Appellant's position is that overcoming the 35 USC 112, 2nd paragraph rejections by cancelling claims 9 and 20 does not enlarge the scope of the claims, such that a rejection under 35 USC 251 would be warranted.

G) The reissue process exists to correct deficiencies in patent claims. This includes deficiencies under 35 USC 112, 2nd paragraph. To that end, courts have held that correction of claims can occur without meaningfully changing the scope of the claims. In this case, the parties have agreed that the scope of claims 1 and 13 remain virtually identical to those of the '969 patent. Therefore, deficiencies noted by the DC and CAFC under 35 USC 112, 2nd paragraph have been overcome, and the pending claims should be reissued.

III. Appellant's Response to Examiner's Arguments

After reviewing and carefully considering the Examiner's arguments in the 2024 April Answer, it appears to the Appellant that one of the challenges faced by the Examiner in the instant application revolves around the differing standards between claim interpretation used at

Samsung
Ex. 1031 - Page 399

the USPTO (broadest reasonable interpretation as explained in MPEP 2111 and 2173.01-2173.02) and that employed at the DC and CAFC levels.

In this case, the Appellant appreciates the substantial challenge faced by the Examiner in adhering to the rationales and conclusions reached by the DC and CAFC (which are binding on the Office) because it appears that these rationales do not harmonize with the standards and practices typical of the USPTO during prosecution.

The following are responses to the Examiner's arguments, organized according to the sections used by the Examiner in the 2024 April Answer.

1. Cancelling Claims 9 and 20 Resolves the Indefiniteness Issue of Claims 1 and 13 (2024 April Answer, pages 3-6)

In response to the Appellant's arguments regarding cancelling claims 9 and 20, the Examiner stated that "…a skilled artisan would still discover the inconsistency which throws the meaning of 'overlay activation criterion' into doubt. That is to say, the intrinsic evidence of at least the prosecution history remains and it would still be a source of confusion/inconsistency for the skilled artisan". (2024 April Answer, page 5)

Moreover the Examiner argues:

> ... the Examiner notes that cancelling dependent claims 9 and 20 is not sufficient to break the link between the "overlay activation criterion" and the "user command information." More specifically, even if dependent claims 9 and 20 were cancelled, a cancelled claim is not removed from the prosecution history and is consequently available for use in construing the remaining claims of the patent. Cancelled dependent claims can be used to construe an independent claim because the dependent claims are included in the prosecution history, which becomes a part of the public record demonstrating Appellant/Patent Owner's understanding of its own claim terms. Thus, as noted above, a skilled artisan would still discover the inconsistency which throws the meaning of "overlay activation criterion" into doubt. (2024 April Answer, pages 5-6)

Samsung
Ex. 1031 - Page 400

Appellant respectfully disagrees. While cancelled claims do remain in the prosecution history, they are noted as cancelled. MPEP 2173.02(I) mentions:

> applicant has the ability to amend the claims during prosecution to ensure that the meaning of the language is clear and definite prior to issuance or provide a persuasive explanation (with evidence as necessary) that a person of ordinary skill in the art would not consider the claim language unclear. *In re Buszard*, 504 F.3d 1364, 1366, 84 USPQ2d 1749, 1750 (Fed. Cir. 2007)

A skilled artisan would understand that cancelation of dependent claims 9 and 20 reflected the intent of the applicant to clarify the record. The metes and bounds of the independent claims 1 and 13 are clear and definite following the cancellation of claims 9 and 20. Following reissuance, a skilled artisan would have no trouble ascertaining whether or not their method would infringe any of the patent claims.

In reviewing the claims to determine infringement, a skilled artisan would see that the independent claims clearly require that the "overlay activation criterion" come from the Internet, and not from the "user's premises" as recited in the canceled dependent claims. And since the dependent claims are canceled, the skilled artisan would not find anything that contradicts this.

Therefore, the skilled artisan would readily determine that if a potentially-infringing method does not come from the Internet, such method would not infringe because the independent claims clearly require that the overlay activation criterion come from the Internat. Moreover, because it is logically impossible for the "overlay activation criterion" to come both from the Internet and not-from-the-Internet, there is no ambiguity as to whether a skilled artisan would even wonder whether their method infringed. It's a binary analysis – either the overlay activation criterion comes from the Internet (in which case it infringes because it meets the claim language of the independent claims) or it does not (in which case it would not infringe since the claim language of the independent claims requires it for infringement).

The proposed reissue claims would be clear and unambiguous. If the skilled artisan reads the specification, the prosecution history and all of the other intrinsic evidence, the metes and bounds of the claim would still be clear. To the extent that the specification could be considered

Samsung
Ex. 1031 - Page 401

to contemplate embodiments where the overlay activation criterion comes from somewhere other than the Internet, those are not claimed here and as such not enforceable.

While the DC doesn't specifically rule on how independent claims 1 and 13 would be interpreted in isolation, the DC does state that those claims unambiguously require that the "overlay activation criterion" comes from the Internet:

> In claims 1 and 13, "overlay activation criterion" must necessarily come from the Internet because the claim states that "overlay activation criterion" is a component of the "overlay-enabling digital data" which data, the claim explicitly states, is provided "over the Internet." (DC opinion, page 8)

Appellant also notes that, during "normal" prosecution practice, it is common for dependent claims to be found indefinite. In these situations, a common remedy is to simply cancel such claims. While such cancellation remains in the prosecution history, the cancelled claim does not "rise from the grave" to continue to afflict the claim set with whatever ambiguities gave rise to a rejection. It is understood that the ultimately-issued claim set does not include the cancelled claims, and therefore issue that gave rise to the cancellation is never used to interpret the remaining claims in the claim set.

The Examiner noted that the situation is a bit different in reissue patents:

> If a reissue patent was issued from the instant reissue proceeding with dependent claims 9 and 20 cancelled, said claims would not vanish from the published reissue patent as intimated by Appellant. Rather, the entirety of cancelled dependent claims 9 and 20 would merely be printed in the newly published reissue patent surrounded by brackets (e.g., see: MPEP 1453(IV)) to indicate their deletion. (2024 April Answer, page 6)

Appellant thanks the Examiner for this clarification. The point remains, however, that regardless of whether the claims are removed from the patent document or printed with brackets, the intention of the patent owner is clear that claim limitations of any canceled claims are not enforceable. Bracketing of cancelled claims in a patent reissuing from this application, together with the totality of the patent's history, in litigation and in prosecution (including this reissue prosecution), would make clear to a skilled artisan that the intention of the Appellant is that the

Samsung
Ex. 1031 - Page 402

"overlay activation criterion" is NOT to be interpreted as coming from a user's premises – but instead coming only from the Internet as required by independent claims 1 and 13. Additionally, as mentioned above, the skilled artisan reading the patent would know that an interpretation of the "overlay activation criterion" as coming from the user's premises would not be enforceable because of the cancellation of claims 9 and 20.

2. Cancelling Claims 9 And 20 In View Of The Rejection Under 35 U.S.C. 112 (pre-AIA), Second Paragraph (2024 April Answer, pages 6-9)

The Examiner's arguments on page 6 through the first paragraph of page 8 appear to largely repeat the arguments of section (1) above regarding the cancellation of claims 9 and 20, and as such Appellant's response herein to same above similarly applies to these arguments.

On page 8 of the 2024 April Answer, the Examiner argues:

> Appellant's arguments as to the proper metes and bounds of independent claims 1 and 13 do not supersede one of the few sources of intrinsic evidence on the meaning of "overlay activation criterion" already in the record. In fact, this issue appears to have been generally addressed in the Decision by the CAFC (see: CAFC Decision, p. 10: "For its part, TVnGO asserts that an overlay activation criterion 'comes from the Internet,' ... This distinction lacks intrinsic support"). Here, the CAFC acknowledged that Patent Owner affirmatively asserted that an overlay activation criterion "comes from the Internet", which is similar to Appellant's current clarification of the terms, and determined, in light of comparing user commands and user command information, that the distinction lacks intrinsic support. Thus, despite Patent Owner's assertions, the CAFC determined that "one or ordinary skill in the art would lack reasonable certainty as to the source of an 'overlay activation criterion'."

Appellant respectfully disagrees. Appellant's arguments are not made in an attempt to supersede the sources of evidence for the meaning of the claim terms noted by the DC and CAFC. Rather, the cancellation of the dependent claims and the corresponding arguments made by Appellant throughout the present reissue application process (including those made in the present appeal) serve to **add** to the sources of evidence for interpreting the metes and bounds of

Samsung
Ex. 1031 - Page 403

the remaining claims. These additional sources of evidence add clarification that was not present at the time of the DC or CAFC proceedings, and would not have been available to a skilled artisan in reading the originally-issued patent claims interpreted by the DC and CAFC. In view of the cancellation of the dependent claims and corresponding arguments contained throughout the prosecution of this reissue application to the present, it is Appellant's position that a skilled artisan would have clarity regarding the claim terms, clarity that they would not have had at the time of the DC or CAFC decisions.

On pages 8-9 of the 2024 April Answer, the Examiner responds to the Appellant's statement from page 12 of the 2024 Brief regarding the intent behind the cancellation of claims 9 and 20 to clarify the claim interpretation, stating:

> Additionally, Appellant's above statement disclaiming/disavowing claim scope related to the "overlay activation criterion" limitation cannot override the claim language itself, which controls the bounds of the claim, and the intrinsic evidence already in the record. Further, Appellant's above statement (i.e., prosecution disclaimer) disclaiming/disavowing claim scope related to the "overlay activation criterion" limitation is not binding on the Office in the instant reissue proceeding. The current prosecution history before the Office is in development and not fixed during examination (e.g., see: MPEP 2173.02(1)).

Yes, of course, Appellant's statement does not override the claim language itself. However, cancellation of claims 9 and 20 does change the claim language of the totality of the claim set. Appellant's statement referenced by the Examiner was offered in support of cancellation of claims 9 and 20, and was merely intended to clarify the patent owner's understanding and intention regarding the metes and bounds of the remaining claims, and the meaning of the terminology therein.

The Examiner repeatedly refers to the "intrinsic evidence already in the record." But that doesn't diminish the fact that the entire prosecution history add to the record, including everything that happens during the reissue process. Thus, a reader of any reissued patent claims, the specification and all of the prosecution history (original and reissue), would understand that the reissue claims do not include limitations from the cancelled dependent claims, which recited

Samsung
Ex. 1031 - Page 404

that the "overlay activation criterion" comes from the user's premises. Given the totality of the intrinsic evidence, which would include the entire reissue prosecution history, the reader would not have to worry about being sued if they practiced a method where "overlay activation criterion" came from the user's premises, because that would be outside of the metes and bounds of the claims as understood by the patent owner.

As to the Examiner's statement that the "prosecution disclaimer" is not binding on the Office and that the prosecution history is not fixed during examination, Appellant agrees. Prosecution disclaimer is not binding. However, this does not negate Appellant's position that cancellation of claims 9 and 20 resolves the ambiguity raised by the DC and CAFC which led to the rejection of the claims under 35 USC 112, 2nd paragraph. Cancellation of claims 9 and 20 leaves the metes and bounds of independent claims 1 and 13 clear and unambiguous. The arguments and statements made by the Appellant during prosecution are in support of this position. Moreover, the Appellant's arguments, including the "prosecution disclaimer", were made with the goal of leaving a very clear record upon issuance of the reissue patent.

3. Cancelling Claims 9 And 20 In View Of The DC And CAFC Rulings (2024 April Answer, pages 9-10)

On page 10 of the 2024 April Answer, the Examiner states:

> It is noted that the referenced arguments by TVnGO appeared to hinge on the idea that the "scope of the independent claim whose meaning is clear on its face" or "[W]here the scope of the independent claim is clear." However, as determined by the CAFC, when all the intrinsic evidence is properly evaluated the scope of independent claims 1 and 13 is not clear and thus the claims are invalid for indefiniteness.

The "intrinsic evidence" available to the DC and CAFC included a claim set that had dependent claims 9 and 20 among the standing claims. Thus, the CAFC determination referenced by the Examiner was based on the intrinsic evidence **up to that point**. As noted above, if the Examiner must use the totality of "intrinsic evidence" relied upon by the DC and CAFC (that includes prosecution history) when examining the pending claims, then it stands to reason that the "intrinsic evidence" considered for the purposes of this reissue application must

Samsung
Ex. 1031 - Page 405

include intrinsic evidence beyond that which was available to the DC and CAFC – which would include the cancellation of claims 9 and 20 and Appellant's arguments.

In other words, the intrinsic evidence available to the Examiner and the Board at this stage includes the cancellation of claims 9 and 20, and Appellant's arguments in support thereof, which were not available to the DC and CAFC at the time they made their decisions.

4. Scope Of The Claims (2024 April Answer, pages 10-14)

Appellant agrees with the Examiner's statement on page 13 of the 2024 April Answer that, even though the previous rejection under 35 USC 251 for improper claim broadening was withdrawn, the Board's addressing the claim scope issue would be of great benefit to both the Examiner and the Appellant because it would greatly expedite prosecution.

In prior conversations, the Examiner has expressed that a reversal on the rejection under 35 USC 112, 2nd paragraph would likely require a new rejection under 35 USC 251. Accordingly, the Board's comments on this topic could help avoid extending prosecution in this regard. Appellant therefore respectfully requests that the Board comment regarding the scope of the claims, despite the lack of a standing rejection under 35 USC 251 for improper claim broadening.

On page 11 of the 2024 April Answer, the Examiner admitted that the amended claims 1 and 13 maintain "virtually identical scope as their corresponding claims in the Merlin '969 patent" and as such, "the scope of amended independent claims 1 and 13 are not enlarged because said claims are fundamentally unchanged." (emphasis in original)

The Examiner further states on page 11 of the 2024 April Answer:

> Therefore, the scope of amended independent claims 1 and 13 are not enlarged because said claims are fundamentally unchanged. That is to say, amended independent claims 1 and 13 still present irreconcilable inconsistencies (i.e., the "overlay activation criterion" indicating that it comes from the Internet and simultaneously not from the Internet (i.e., from a user's premises)) that render their precise meanings not reasonably certain.

Samsung
Ex. 1031 - Page 406

Appellant understands the Examiner's position to be that the "irreconcilable inconsistencies" remain in claims 1 and 13 **because** the scope of the claims is fundamentally unchanged. In other words, resolving the inconsistencies can only occur via a change in the scope of the claims. Appellant disagrees.

In the DC decision, the inconsistency is only introduced when the DC moves from interpreting claims 1 and 13 to interpreting claims 9 and 20 (DC decision, page 8, emphasis added):

> In claims 1 and 13, "overlay activation criterion" must necessarily come from the Internet because the claim states that "overlay activation criterion" is a component of the "overlay-enabling digital data" which data, the claim explicitly states, is provided "over the Internet." ['220 Patent, 8:61-9:7, 10:25-40; '969 Patent, 9:7-20, 10:36-50] **However**, claims 9 and 20, as well as the specifications, state that "user command information" may be a component of "overlay activation criterion" and that such information is provided at the user's premises and not over the Internet.

Because the inconsistency found by the DC only arises when the independent claims 1 and 13 are considered together with their respective dependent claims 9 and 20, it is possible to resolve the inconsistency by addressing it at claims 9 and 20 – which is exactly what Appellant has done by cancelling the claims.

The Examiner then indicated on pages 11-12 of the 2024 April Answer (underlining in original):

> The Examiner's position is that if the Appellant were correct, based on Appellant's general argument (i.e., "A reissue patent without cancelled claims 9 and 20 would no longer have a source of confusion/inconsistency ... the skilled artisan would only discover the meaning of' overlay activation criterion' as coming 'from the Internet' ... intended to exclude the possibility that the claims could be interpreted to mean that the 'overlay activation criterion' could come from the user's premises") and the cancelling of dependent claims 9 and 20, then the scope of amended independent claims 1 and l3 would indeed be changed. In that case, independent claims 1 and 13 found indefinite by

Samsung
Ex. 1031 - Page 407

the District Court, and subsequently affirmed as indefinite by the CAFC, would now be definite in light of the disclosure of the Merlin '969 patent.

Appellant respectfully disagrees. As noted by the Examiner on page 11 of the 2024 April Answer, the "amended claims 1 and 13 at least maintain virtually identical scope as their corresponding claims in the Merlin '969 patent…". It is paradoxical to declare that a claim's scope remains virtually identical, only to declare that the same claim has a different scope without changing the actual text of the claim.

The Examiner supports his position by citing to *Ex parte Adams*, asserting (2024 April Answer, page 12):

> However, as previously noted (e.g., see: (1) Non-Final Action, pp. 4-5 in 17/867,612 and (2) Final Action, pp. 4-6 in related 171714,917 - citing *Ex parte Adams*, Appeal 2007 -0441 (March 14,2007)), this would be considered an enlarging of the scope of the claims (e.g., see: MPEP 1412.03(1) - "For example, if any amended or newly added claim in the reissue contains within its scope any conceivable product or process which would not have infringed the patent, then that reissue claim would be broader than the patent claims ... A claim which covers something that the original claims do not is a broadened claim. A claim would be considered a broadening claim if the patent owner would be able to sue any party for infringement who previously could not have been sued for infringement") of the Merlin '969 patent which would be improper since the instant reissue application was filed more than two years after the Merlin '969 patent issued. At the simplest level, the scope of amended independent claims 1 and l3 would be considered enlarged because (1) the "overlay activation criterion" limitation would be limited to only coming "from the Internet" instead of coming "from the Internet" and simultaneously "not from the Internet" (i.e., the scope going from A + not A to merely A)(e.g., see: CAFC Decision, p. 10: "the intrinsic evidence presents ... irreconcilably inconsistent information: the '220 and '969 [p]atents indicate that 'overlay activation criterion' comes from the Internet and simultaneously not from the Internet") and (2) their claim scope would go from indefinite (see above) to definite and thus said claims would cover something that the original claims did not (e.g., the Patent Owner would now be

Samsung
Ex. 1031 - Page 408

able to sue parties for infringement who previously could not have been sued for infringement).

Appellant respectfully disagrees. Appellant notes that *Ex parte Adams* ("*Adams*") was only first mentioned in the prosecution of this application in the Examiner's Advisory Action mailed November 7, 2023 ("2023 November AA"). However, after review of the *Ex parte Adams* decision, it has significant differences from the application in our case.

First, Appellant notes that *Adams* states (italics in original, bold emphasis added):

> Binding precedent, as well as § 1412.03 of the *Manual of Patent Examining Procedure* (8th ed., Rev. 5, Aug. 2006), tells us that a claim is enlarged if it is so **changed** as to bring within its scope any structure which was not within the scope of the original patent claims.

Section 1412.03(I) of the current version of the MPEP quoted by the Examiner similarly recites (emphasis added):

> For example, if any **amended** or newly added claim in the reissue contains within its scope any conceivable product or process which would not have infringed the patent, then that reissue claim would be broader than the patent claims

In our case, claims 1 and 13 have not been changed or amended. Claims 1 and 13 have been amended solely to correct typographical/clerical errors that resulted in antecedent basis issues. Indeed, the Examiner has never even suggested that these amendments change the scope of the claim. Thus, for the purposes of the analysis according to *Adams* and section 1412.03(I) of the MPEP, independent claims 1 and 13 **have not been changed.** Consequently, it is Appellant's position that it is not possible for the claim scope to change if the substantive language of the claim itself that would be read to determine its scope has not changed.

Second, Appellant notes that in *Adams*, the claim contained an intra-claim inconsistency that required extensive amendment because the claim required a geometric and physical impossibility (see Adams, page 10):

In fact, no device would fall within the scope of patent claim 1 because it requires an element to be both parallel and orthogonal (i.e., perpendicular) to another element. In the world of physics and geometry this is a "no-no."

In our case, claims 1 and 13 have no internal inconsistency. Instead, the DC only first mentions the inconsistency when discussing dependent claims 9 and 20 in combination with the respective base claims 1 and 13. Thus, the situation in *Adams* is not analogous to the situation here.

On pages 13-14 of the 2024 April Answer, the Examiner argued:

> Third, the Examiner notes that disclaiming/disavowing claim scope (i.e., altering claim scope) related to the "overlay activation criterion" limitation without substantively amending the language of independent claims 1 and 13 appears to be precisely what Appellant is attempting to accomplish in the instant reissue application. That is to say, Appellant attempts to exclude the possibility that the claims could be interpreted to mean that the "overlay activation criterion" could come from a user's premises by providing the following statement disclaiming/disavowing claim scope related to the "overlay activation criterion" limitation:

> Dear Reader of the Prosecution History: Claims 9 and 20 are cancelled herein because it is Applicant's/Appellant's intent to remove any possible interpretation of the "overlay activation criterion" as coming from the user's premises (i.e., not from the internet).

Appellant respectfully disagrees. Appellant is not attempting to disclaim/disavow claim scope by this statement for the purposes of prosecuting the reissue application. The Appellant agrees that the statement is not binding on the Office during the prosecution process. Regardless, the fact remains that the Appellant cancelled claims 9 and 20 to overcome the rejection under 35 USC 112, 2nd paragraph without substantially amending the language of independent claims 1 and 13. And the Examiner has acknowledged that the scope of the independent claims has remained virtually identical to those of the originally-issued '969 patent. The above statement was made with the intent to make the record as clear as possible. Appellant

Samsung
Ex. 1031 - Page 410

understands that it is the actual cancellations of claims 9 and 20 and substantive arguments in response to the rejections that the Office must consider.

5. The Purpose of the Reissue Process (2024 April Answer, pages 14-15)

On page 15 of the 2024 April Answer, the Examiner states:

> However, as previously noted, changing the meaning of "overlay activation criterion" to only come "from the Internet" would not be simply correcting an antecedent basis issue that does not meaningfully change the scope of the claims. In fact, as recognized by Appellant, this situation is not a basic antecedent basis issue. And while the reissue process allows for a vast array of errors to be corrected in a patent (see: MPEP 1402), the Examiner notes that 35 U.S.C. 251 imposes strict limits (see: MPEP 1412.03) related to a "broadened reissue claim" when a reissue application is filed after two years from the grant of the original patent (e.g., see: Informative Decision - *Ex parte Adams*, Appeal 2007-0441 (March 14,2007) which is related to attempting to change indefinite patent claims with substantially similar "irreconcilable inconsistencies" in a reissue application filed more than two years after the patent issued). Unfortunately for Appellant, the instant reissue application was filed more than two years after the Merlin '969 patent issued. Thus, Appellant's options in the instant reissue proceeding are strictly limited.

Appellant recognizes that the rejection under 35 USC 112, 2nd paragraph is not an antecedent basis issue. However, as argued before, courts generally have allowed for the correction of 35 USC 112, 2nd paragraph issues (which includes antecedent basis issues) via reissue in situations where the claim scope has not been meaningfully changed Consequently, while 35 USC 251 imposes "strict limits" as mentioned by the Examiner, it is Appellant's position that the cancellation of claims 9 and 20, which even the Examiner recognizes leaves the scope of claims 1 and 13 substantially unchanged, resolves the indefiniteness issues of claims 1 and 13 without enlarging the scope of the claims – which is permissible under 35 USC 251.

If the Board were to find the independent claims definite, but still find that the claim scope of virtually unamended claims has changed, it would have the effect of putting patent owners on notice that reissue cannot be used to correct definiteness issues outside the two-year

Samsung
Ex. 1031 - Page 411

post-issuance time period. After all, if virtually unchanged claims can be found to have improperly enlarged scope, what hope is there for claims that require actual correction? In these cases, patent owners would be incentivized to simply go to trial and hope that the court would not find these issues, rather than turning to the USPTO for correction ahead of litigation.

IV. Request For Reversal

Based on the arguments of the Appellant's arguments in the Appeal Brief and above, the Appellant respectfully requests reversal of the Examiner's rejections of the claims under 35 USC 112, 2nd paragraph, and guidance that the claim scope of claims 1 and 13 has not been enlarged such that the currently pending claims can proceed to allowance.

Respectfully submitted,

/Tomas A Prieto/
Tomas A. Prieto
Reg. No. 60,675
Representative for Appellant

Fish IP Law, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 94612
Telephone (949) 943-8300
Fax (949) 943-8358
email: tprieto@fishiplaw.com

Samsung
Ex. 1031 - Page 412

PTO/AIA/32 (11-23)
Approved for use through 10/31/2026. OMB 0651-0063
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REQUEST FOR ORAL HEARING BEFORE THE PATENT TRIAL AND APPEAL BOARD

Docket Number (Optional): 103692.0001US4re

I hereby certify that this correspondence is being being transmitted by the USPTO patent electronic filing system or facsimile to the USPTO, or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on June 20, 2024.

Signature /Tomas A. Prieto/

Typed or printed name Tomas A. Prieto

First Named Inventor: Yakkov Merlin	
Application Number: 17/867612	Filed: July 18, 2022
For:	
Art Unit: 3992	Examiner: Adam L. Basehoar

Applicant hereby **requests an oral hearing** before the Patent Trial and Appeal Board in the appeal of the above-identified application.

The fee for this Request for Oral Hearing is (37 CFR 41.20(b)(3)) $ 1360.00

☑ Applicant asserts small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by 60%, and the resulting fee is: $ 544.00

☐ Applicant certifies micro entity status. See 37 CFR 1.29. Therefore, the fee shown above is reduced by 80%, and the resulting fee is: $ _____
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 500341.

☑ Payment made via USPTO patent electronic filing system.

☐ A petition for an extension of time under 37 CFR 1.136(b) (PTO/SB/23 or equivalent) is enclosed.
For extensions of time in reexamination proceedings, see 37 CFR 1.550.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant ☑ attorney or agent of record Registration number 60675 ☐ attorney or agent acting under 37 CFR 1.34 Registration number _____

Signature /Tomas A. Prieto/

Typed or printed name Tomas A. Prieto

Telephone Number 949-943-8329

Date June 20, 2024

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-0031. Public burden for this form is estimated to average 12 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. The United States Patent and Trademark Office (USPTO) collects the information in this record under authority of 35 U.S.C. 2. The USPTO's system of records is used to manage all applicant and owner information including name, citizenship, residence, post office address, and other information with respect to inventors and their legal representatives pertaining to the applicant's/owner's activities in connection with the invention for which a patent is sought or has been granted. The applicable Privacy Act System of Records Notice for the information collected in this form is COMMERCE/PAT-TM-7 Patent Application Files, available in the Federal Register at 78 FR 19243 (March 29, 2013). https://www.govinfo.gov/content/pkg/FR-2013-03-29/pdf/2013-07341.pdf

Routine uses of the information in this record may include disclosure to:

1) law enforcement, in the event that the system of records indicates a violation or potential violation of law;

2) a federal, state, local, or international agency, in response to its request;

3) a contractor of the USPTO having need for the information in order to perform a contract;

4) the Department of Justice for determination of whether the Freedom of Information Act (FOIA) requires disclosure of the record;

5) a Member of Congress submitting a request involving an individual to whom the record pertains, when the individual has requested the Member's assistance with respect to the subject matter of the record;

6) a court, magistrate, or administrative tribunal, in the course of presenting evidence, including disclosures to opposing counsel in the course of settlement negotiations;

7) the Administrator, General Services Administration (GSA), or their designee, during an inspection of records conducted by GSA under authority of 44 U.S.C. 2904 and 2906, in accordance with the GSA regulations and any other relevant (i.e., GSA or Commerce) directive, where such disclosure shall not be used to make determinations about individuals;

8) another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c));

9) the Office of Personnel Management (OPM) for personnel research purposes; and

10) the Office of Management and Budget (OMB) for legislative coordination and clearance.

If you do not furnish the information requested on this form, the USPTO may not be able to process and/or examine your submission, which may result in termination of proceedings, abandonment of the application, and/or expiration of the patent.

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	**06/20/2024 04:09:37 PM Z ET**	**103692.0001US4re**

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Robert Fish
PATENT CENTER #	66049899	FILING DATE	07/18/2022
CUSTOMER #	24392	FIRST NAMED INVENTOR	Yakkov MERLIN
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	-

Documents

TOTAL DOCUMENTS: 3

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Certification and Transmittal of Forwarding Fee - aia0034.pdf	2	Certification and Transmittal of Appeal Forwarding Fee	214 KB
Request for Oral Hearing.pdf	2	Request for Oral Hearing	488 KB
Reply Brief-01L 2024-06-20 TVnGO 1US4re.pdf	16	Reply Brief Filed	189 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)

Certification and Transmittal of Forwarding Fee - aia0034.pdf	FDB7C8ED068C24B8B786A74B51F4B370A2D5A64869ED036A3CAB4358A8DC53D47EF8F19A21F0CA84E390BC09AD38870AD31F5B520BEA1C80439BA23D1ACBBFF1
Request for Oral Hearing.pdf	39E0F02084B9CBCCEEAC78DB93BC973D252E4E1F7C8B45B47C1969884750 7B449E47715C9CC2C44EF65844A5C354D495FD3689DE8E2FCD69997EC374E6DCA01B
Reply Brief-01L 2024-06-20 TVnGO 1US4re.pdf	0C2AB04939F067C79A53954C7DB0C549A481AC8871BC7FD312DAC684E29CD49266F2F832A39F41B7350834FE2563F1865F528BCD4094160 1005D2592BE104D83

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 06/26/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
06/26/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YAKKOV MERLIN

Appeal 2024-003078
Application 17/867,612
Technology Center 3900

APPEAL DOCKETING NOTICE

The Patent Trial and Appeal Board received the appeal in the above-identified application from the Technology Center on June 24, 2024, and has assigned it the appeal number indicated above.

The recipient of this notice is reminded of its ongoing duty, within 20 days of any change during the proceeding, to update its mandatory notices to identify the real party-in-interest and each judicial or administrative proceeding that could affect, or be affected by, the Board proceeding. 37 C.F.R. § 41.8. For example, another docketed appeal in a related application may have the potential to affect, or be affected by, the Board proceeding.

In all future communications regarding this appeal, please include both the application number and the appeal number. Telephone inquiries can be made by calling 571-272-9797 and referencing the appeal number listed above. The mailing address for the Board is:

PATENT TRIAL and APPEAL BOARD
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VIRGINIA 22313-1450

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 07/29/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
07/29/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

FISH IP LAW, LLP
19900 MacArthur
Blvd, Suite 810
Irvine, CALIFORNIA
92612

Appeal No:	2024-003078
Appellant:	YAKKOV MERLIN
Application No:	17/867,612
Hearing Room:	Alexandria: Room A
Hearing Docket:	Mechanical
Hearing Date:	Thursday, August 22, 2024
Hearing Time:	1:00 PM ET
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia** **22313-1450**

NOTICE OF HEARING - ALEXANDRIA, VIRGINIA
RESPONSE REQUIRED WITHIN 21 DAYS

The Patent Trial and Appeal Board (PTAB) will hear the above-identified appeal on the date indicated. The hearing will commence at the time set, and as soon as the argument in one appeal concludes, the succeeding appeal will be taken up. The time allowed for argument is 20 minutes, unless additional time is requested and approved before the argument commences. If the application involved in this appeal has been published, the hearing will be open to the public.

Hearing Attendance Confirmation or Waiver

Appellant is required to confirm attendance at the hearing or waive the hearing within 21 days of the mailing date of this notice. Appellant may confirm or waive attendance by completing the "APPELLANT RESPONSE TO NOTICE OF HEARING" and returning it to the PTAB.

Options for Hearing Attendance

If Appellant opts to attend the hearing, Appellant may appear in-person, by video, or by telephone. In Appellant's response to the NOTICE OF HEARING, Appellant should indicate the manner in which Appellant will appear for the hearing.

If Appellant is no longer interested in having a hearing, then Appellant must file a waiver of the hearing with the PTAB. This allows the panel of Administrative Patent Judges assigned to the appeal to act promptly on the appeal without waiting for the hearing date.

If Appellant fails to respond to this NOTICE OF HEARING, the PTAB will issue a decision on the briefs based on the written record.

In-Person Hearing Attendance

The hearing will take place at the location specified in the header, however Appellant may request to appear at a hearing room in the USPTO Alexandria headquarters or a hearing room or conference room in one of the USPTO regional offices located in (1) Detroit, Michigan; (2) Dallas, Texas; (3) Denver, Colorado; and (4) San Jose, California. The PTAB attempts to grant all hearing location requests, subject to space availability

Usage of a hearing room or a conference room in the USPTO Alexandria headquarters or one of the regional offices is not guaranteed until confirmed by the PTAB. In the event the request cannot be granted, then Appellant is responsible for proposing an alternate option, such as selecting a different USPTO location, by telephone, or by video, which is subject to approval by PTAB.

Appellant's selection and the PTAB's approval to utilize a hearing room or a conference room other than that of the designated hearing location does not guarantee that an Administrative Patent Judge assigned to the appeal will be physically present at that location, and the hearing itself may be conducted via video..

Remote Video Hearing Attendance

Appellant may participate in a hearing by video at a location other than the USPTO Alexandria headquarters or a regional office. Appellant will receive an Order detailing the video hearing instructions.

Telephonic Hearing Attendance

Appellant may participate in a hearing by telephone. Appellant will receive an Order detailing the telephonic hearing instructions.

Remote Viewing Request

Members of the public may request to remotely view this oral hearing. If resources are available, the Board generally expects to grant such requests.

In addition to remote viewing of an oral hearing, the USPTO Alexandria headquarters and the USPTO regional office locations in (1) Detroit, Michigan; (2) Dallas, Texas; (3) Denver, Colorado; and (4) San Jose, California are generally available for any member of the public to view a hearing, subject to room availability and advance coordination with the PTAB.

If Appellant objects to the Board granting such requests, for example, because confidential information may be discussed, the party must notify the Board by contacting PTABHearings@uspto.gov at least five business days prior to the oral hearing date.

Legal Experience and Advancement Program

The Board has established the "Legal Experience and Advancement Program," or "LEAP," to encourage advocates before the Board to develop their skills and to aid in succession planning for the next generation. The Board defines a LEAP practitioner as a patent agent or attorney having three (3) or fewer substantive oral arguments in any federal tribunal, including PTAB. Whether an argument is "substantive" for purposes of determining whether an advocate qualifies as a LEAP practitioner will be made on a case-by-case basis with considerations to include, for example, the amount of time that the practitioner argued, the circumstances of the argument, and whether the argument concerned the merits or ancillary issues.

Appellants are encouraged to participate in the Board's LEAP program. Appellant may request that a LEAP practitioner participate in the program and conduct at least a portion of the oral argument. In exchange, the Board will grant up to fifteen (15) minutes of additional argument time, depending on the length of the proceeding and the PTAB's hearing schedule. Appellant should submit a request and LEAP verification form no later than at least five (5) business days before the hearing, by email to the Board at PTABHearings@uspto.gov. A combined LEAP Practitioner Request for Oral Hearing Participation and Verification Form is available on the LEAP website, www.uspto.gov/leap.

A LEAP practitioner may conduct the entire oral argument or may share time with other counsel, provided that the LEAP practitioner is offered a meaningful and substantive opportunity to argue before the Board. Appellant has the discretion as to the type and quantity of oral argument that will be conducted by the LEAP practitioner. Moreover, whether the LEAP practitioner conducts the argument in whole or in part, the Board will permit more experienced counsel to provide some assistance to the LEAP practitioner, if necessary, during oral argument, and to clarify any statements on the record before the conclusion of the oral argument. Importantly, the Board does not draw any inference about the importance of a particular issue or issues, or the merits of Appellant's arguments regarding that issue, from the Appellant's decision to have (or not to have) a LEAP practitioner argue.

In instances where an advocate does not meet the LEAP eligibility requirements, due to the number of "substantive" oral hearing arguments, but nonetheless has a basis for considering themselves to be in the category of advocates that this program is intended to assist, the Board encourages argument by such advocates during oral hearings. Even though additional argument time will not be provided in such circumstances, as with LEAP, an Appellant may request to share time with counsel and the Board will permit more experienced counsel to provide some assistance, if necessary, during oral argument, and to clarify any statements on the record before the conclusion of the oral argument.

As always, all practitioners appearing before the Board shall demonstrate the highest professional standards. All practitioners are expected to have a command of the factual record, the applicable law, and Board procedures, as well as the authority to commit the party they represent. The Board discerns that it is often LEAP practitioners who have the best understanding of the facts of the case and the evidence of record, and the Board encourages their participation. Examples of the issues that a LEAP practitioner may argue include claim construction argument(s), or patentability argument(s) including, e.g., analyses of prior art or objective indicia of non-obviousness.

Special Requests

If Appellant has any special requests related to appearing at the oral hearing, Appellant should inform the PTAB. Special requests may include accommodations for deaf or hard-of-hearing individuals and blind or low vision individuals. Additionally, Appellant may assist the PTAB by indicating ways to accommodate the special requests. The PTAB will make every effort to accommodate the special requests in the manner suggested by Appellant.

Submission of Appellant's Demonstratives

Demonstrative exhibits are neither required nor expected, but Appellant may use them to assist in the presentation of its case. If Appellant has any Power Point slides or other demonstratives, they must be submitted for inclusion into the record at least ten (10) business days before the hearing date by submitting them through the USPTO Patent Center available at https://patentcenter.uspto.gov. If demonstrative exhibits are provided, they must not include any information not previously made of record in this proceeding, and the Board will refuse to allow the use of demonstrative exhibits that do not comply with this requirement. *See, e.g.,* 37 C.F.R. § 41.47(e)(1), (2). In addition, a party must clearly mark all demonstratives with the words "DEMONSTRATIVE EXHIBIT – NOT EVIDENCE" in the footer.

Submission of Appellant's Response to the Notice of Hearing*

To return a completed APPELLANT RESPONSE TO NOTICE OF HEARING, Appellant may use one of the following transmittal methods:

1. By the USPTO Patent Center, available at https://patentcenter.uspto.gov
2. By USPS first class mail to the PTAB mailing address:
   Patent Trial and Appeal Board
   United States Patent and Trademark Office
   P.O. BOX 1450
   Alexandria, Virginia 22313-1450

In all communications relating to this appeal, please identify the appeal number along with the underlying application number.

Questions

For further information about hearings, see 37 CFR § 41.47 and the Hearings section of the PTAB webpage: http://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/hearings. Also, for questions, please contact the PTAB Hearings Clerk at 571-272-9797.

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

FISH IP LAW, LLP
19900 MacArthur
Blvd, Suite 810
Irvine, CALIFORNIA
92612

Appeal No:	2024-003078
Appellant:	YAKKOV MERLIN
Application No:	17/867,612
Hearing Room:	Alexandria: Room A
Hearing Docket:	Mechanical
Hearing Date:	Thursday, August 22, 2024
Hearing Time:	1:00 PM ET
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia** **22313-1450**

APPELLANT RESPONSE TO NOTICE OF HEARING

Appellant responds to the NOTICE OF HEARING in the above-identified appeal.

Hearing Attendance Options (please select one)

( ) I elect an IN-PERSON hearing and will appear at a hearing room in the following USPTO office:

( ) ALEXANDRIA, VA - 600 Dulany Street
( ) DALLAS, TX - 207 South Houston Street
( ) SAN JOSE, CA – 26 S. Fourth Street
( ) DETROIT, MI - 300 River Place Drive
( ) DENVER, CO – 1961 Stout Street

( ) I elect a remote VIDEO hearing and will appear from a non-USPTO location that I secure for myself.

( ) I elect a TELEPHONIC hearing.

( ) I WAIVE the hearing.

( ) I am requesting to RESCHEDULE the hearing. **A separate paper must be filed.**

Conflicts

To aid the judges assigned to the appeal in determining whether any conflicts exist that may require a recusal, please list the names of any additional person(s) who will be participating in the oral hearing and their affiliation with Appellant.

_____

_____

Special Requests

If Appellant has any special requests related to appearing at the oral hearing, please list those requests. Special requests may include accommodations for deaf or hard-of-hearing individuals and blind or low vision individuals. For any special request, please indicate any ways that the PTAB may accommodate the special request.

_____

_____

For any questions regarding Appellant's response to the NOTICE OF HEARING, Appellant may be reached via the contact information provided below.

Typed or Printed Name of Attorney/Agent/Appellant	Registration No.
E-Mail address	Phone number
Signature of Attorney/Agent/Appellant	Date

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	**08/05/2024 03:13:35 AM Z ET**	**103692.0001US4re**

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Tomas Prieto
PATENT CENTER #	66644694	FILING DATE	07/18/2022
CUSTOMER #	24392	FIRST NAMED INVENTOR	Yakkov MERLIN
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	-

Documents

TOTAL DOCUMENTS: 2

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
2024-08-05 Request to Reschedule Hearing - flat.pdf	2	Appeal Postponement of Oral Hearing Request	175 KB
Request to Reschedule Oral Hearing-01c 2024-08-05 - PDF.pdf	2	Appeal Postponement of Oral Hearing Request	20 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
2024-08-05 Request to	C35E59198D1DA82C213A5FCB323528E4FC337EAAC28C2F84

Reschedule Hearing - flat.pdf	B4F73FDF30B74AD09D00BA358CAA3455B5D8BF167BD2A9A352FCD1E38224591 7E83FCB56807E79A0
Request to Reschedule Oral Hearing-01c 2024-08-05 - PDF.pdf	61C4B95DF1A1489549CC2D211356440687ED852731AB573822862ED917BB32948037CE188D93F821EC8B0937CCFC8AC790763D40D84645ABA161CA9F169BB468

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

FISH IP LAW, LLP
19900 MacArthur
Blvd, Suite 810
Irvine, CALIFORNIA
92612

Appeal No:	2024-003078
Appellant:	YAKKOV MERLIN
Application No:	17/867,612
Hearing Room:	Alexandria: Room A
Hearing Docket:	Mechanical
Hearing Date:	Thursday, August 22, 2024
Hearing Time:	1:00 PM ET
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia** **22313-1450**

APPELLANT RESPONSE TO NOTICE OF HEARING

Appellant responds to the NOTICE OF HEARING in the above-identified appeal.

Hearing Attendance Options (please select one)

( ) I elect an IN-PERSON hearing and will appear at a hearing room in the following USPTO office:

( ) ALEXANDRIA, VA - 600 Dulany Street
( ) DALLAS, TX - 207 South Houston Street
( ) SAN JOSE, CA – 26 S. Fourth Street
( ) DETROIT, MI - 300 River Place Drive
( ) DENVER, CO – 1961 Stout Street

( ) I elect a remote VIDEO hearing and will appear from a non-USPTO location that I secure for myself.

( ) I elect a TELEPHONIC hearing.

( ) I WAIVE the hearing.

(x) I am requesting to RESCHEDULE the hearing. **A separate paper must be filed.**

Conflicts

To aid the judges assigned to the appeal in determining whether any conflicts exist that may require a recusal, please list the names of any additional person(s) who will be participating in the oral hearing and their affiliation with Appellant.

_____

_____

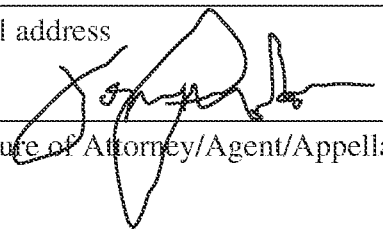
Special Requests

If Appellant has any special requests related to appearing at the oral hearing, please list those requests. Special requests may include accommodations for deaf or hard-of-hearing individuals and blind or low vision individuals. For any special request, please indicate any ways that the PTAB may accommodate the special request.

_____

_____

For any questions regarding Appellant's response to the NOTICE OF HEARING, Appellant may be reached via the contact information provided below.

Tomas A. Prieto	60,675
Typed or Printed Name of Attorney/Agent/Appellant	Registration No.
tprieto@fishiplaw.com	949-943-8329
E-Mail address	Phone number
	August 5, 2024
Signature of Attorney/Agent/Appellant	Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appeal No.:	**2024-003078**
Appl No.:	**17/867,612**
Appellant:	**TVnGO Ltd. (BVI)**
Filing Date:	**July 18, 2022**
Art Unit:	**3992**
Examiner:	**Basehoar, Adam L.**
Attorney Docket No.:	**103692.0001US4re**
Title	**FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

Patent Trial and Appeal Board
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANT REQUEST TO RESCHEDULE HEARING

Dear Sir/Madam:

This Appellant Request to Reschedule Hearing accompanies Appellant's Response to Notice of Hearing. Appellant requests rescheduling of the hearing because Appellant's representative is travelling and will not be available for any of the available hearing options on the August 22, 2024 date. While Appellant's representative plans to elect a video hearing, Appellant's representative will not have access to a stable internet connection or a sufficiently private space on the current hearing date from which to reliably log into the video hearing.

Appellant's representative will be readily available after September 1, 2024 for a video hearing. Applicant's representative expects to be unavailable from November 5-11, 2024, and that is the only known potential unavailability.

Samsung
Ex. 1031 - Page 430

Respectfully submitted,
Fish IP Law, LLP

Date: August 5, 2024

By: /Tomas A. Prieto/
Tomas A. Prieto
Reg. No. 60,675

Fish IP Law, LLP
19900 MacArthur Blvd., Suite 810
Irvine, CA 92612
Telephone (949) 943-8300
Fax (949) 943-8358

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 08/07/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
08/07/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

PTABHearings@uspto.gov
571-272-9797

Date: August 05, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YAKKOV MERLIN

Appeal 2024-003078
Application 17/867,612
Technology Center 3900

Before Deputy Clerk, Hearing Operations.

ORDER GRANTING REQUEST TO RESCHEDULE ORAL HEARING

An oral hearing before a merits panel of the Patent Trial and Appeal Board had been set for **Thursday, August 22, 2024 at 1:00 PM ET** in Alexandria, Virginia. Appellant requested to reschedule the oral hearing.

The request to reschedule the oral hearing is **GRANTED**. The oral argument will be rescheduled to a date and location that will be determined later. **Absent exceptional circumstances, any further requests for postponement or relocation of hearing changes will not be permitted.**

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CALIFORNIA 92612

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	**08/09/2024 06:24:36 AM Z ET**	**103692.0001US4re**

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Tomas Prieto
PATENT CENTER #	66719898	FILING DATE	07/18/2022
CUSTOMER #	24392	FIRST NAMED INVENTOR	Yakkov MERLIN
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	-

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
2024-08-09 Response to Notice of Hearing - flat.pdf	2	Confirmation of Hearing by Appellant	175 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
2024-08-09 Response to Notice of Hearing - flat.pdf	C7B29F16541946FAF8CBA77F02DEED4A33521C3678787C80D865A790B8CFF7AFAF7157136E59A185A626E7BC9313B63CE244D6BE007A80C543A0CD758013309E

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

FISH IP LAW, LLP
19900 MacArthur
Blvd, Suite 810
Irvine, CALIFORNIA
92612

Appeal No:	2024-003078
Appellant:	YAKKOV MERLIN
Application No:	17/867,612
Hearing Room:	Alexandria: Room A
Hearing Docket:	Mechanical
Hearing Date:	Wednesday, September 04, 2024
Hearing Time:	1:00 PM ET
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia** **22313-1450**

APPELLANT RESPONSE TO NOTICE OF HEARING

Appellant responds to the NOTICE OF HEARING in the above-identified appeal.

Hearing Attendance Options (please select one)

( ) I elect an IN-PERSON hearing and will appear at a hearing room in the following USPTO office:

( ) ALEXANDRIA, VA - 600 Dulany Street
( ) DALLAS, TX - 207 South Houston Street
( ) SAN JOSE, CA – 26 S. Fourth Street
( ) DETROIT, MI - 300 River Place Drive
( ) DENVER, CO – 1961 Stout Street

( ) I elect a remote VIDEO hearing and will appear from a non-USPTO location that I secure for myself.

(X) I elect a TELEPHONIC hearing.

( ) I WAIVE the hearing.

( ) I am requesting to RESCHEDULE the hearing. **A separate paper must be filed.**

Conflicts

To aid the judges assigned to the appeal in determining whether any conflicts exist that may require a recusal, please list the names of any additional person(s) who will be participating in the oral hearing and their affiliation with Appellant.

_____

_____

Special Requests

If Appellant has any special requests related to appearing at the oral hearing, please list those requests. Special requests may include accommodations for deaf or hard-of-hearing individuals and blind or low vision individuals. For any special request, please indicate any ways that the PTAB may accommodate the special request.

_____

_____

For any questions regarding Appellant's response to the NOTICE OF HEARING, Appellant may be reached via the contact information provided below.

Tomas A. Prieto	60,675
Typed or Printed Name of Attorney/Agent/Appellant	Registration No.
tprieto@fishiplaw.com	949-943-8329
E-Mail address	Phone number
	August 9, 2024
Signature of Attorney/Agent/Appellant	Date

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 08/09/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
08/09/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

FISH IP LAW, LLP
19900 MacArthur
Blvd, Suite 810
Irvine, CALIFORNIA
92612

Appeal No:	2024-003078
Appellant:	YAKKOV MERLIN
Application No:	17/867,612
Hearing Room:	Alexandria: Room A
Hearing Docket:	Mechanical
Hearing Date:	Wednesday, September 04, 2024
Hearing Time:	1:00 PM ET
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia** **22313-1450**

NOTICE OF HEARING - ALEXANDRIA, VIRGINIA
RESPONSE REQUIRED WITHIN 21 DAYS

The Patent Trial and Appeal Board (PTAB) will hear the above-identified appeal on the date indicated. The hearing will commence at the time set, and as soon as the argument in one appeal concludes, the succeeding appeal will be taken up. The time allowed for argument is 20 minutes, unless additional time is requested and approved before the argument commences. If the application involved in this appeal has been published, the hearing will be open to the public.

Hearing Attendance Confirmation or Waiver

Appellant is required to confirm attendance at the hearing or waive the hearing within 21 days of the mailing date of this notice. Appellant may confirm or waive attendance by completing the "APPELLANT RESPONSE TO NOTICE OF HEARING" and returning it to the PTAB.

Options for Hearing Attendance

If Appellant opts to attend the hearing, Appellant may appear in-person, by video, or by telephone. In Appellant's response to the NOTICE OF HEARING, Appellant should indicate the manner in which Appellant will appear for the hearing.

If Appellant is no longer interested in having a hearing, then Appellant must file a waiver of the hearing with the PTAB. This allows the panel of Administrative Patent Judges assigned to the appeal to act promptly on the appeal without waiting for the hearing date.

If Appellant fails to respond to this NOTICE OF HEARING, the PTAB will issue a decision on the briefs based on the written record.

In-Person Hearing Attendance

The hearing will take place at the location specified in the header, however Appellant may request to appear at a hearing room in the USPTO Alexandria headquarters or a hearing room or conference room in one of the USPTO regional offices located in (1) Detroit, Michigan; (2) Dallas, Texas; (3) Denver, Colorado; and (4) San Jose, California. The PTAB attempts to grant all hearing location requests, subject to space availability

Usage of a hearing room or a conference room in the USPTO Alexandria headquarters or one of the regional offices is not guaranteed until confirmed by the PTAB. In the event the request cannot be granted, then Appellant is responsible for proposing an alternate option, such as selecting a different USPTO location, by telephone, or by video, which is subject to approval by PTAB.

Appellant's selection and the PTAB's approval to utilize a hearing room or a conference room other than that of the designated hearing location does not guarantee that an Administrative Patent Judge assigned to the appeal will be physically present at that location, and the hearing itself may be conducted via video..

Remote Video Hearing Attendance

Appellant may participate in a hearing by video at a location other than the USPTO Alexandria headquarters or a regional office. Appellant will receive an Order detailing the video hearing instructions.

Telephonic Hearing Attendance

Appellant may participate in a hearing by telephone. Appellant will receive an Order detailing the telephonic hearing instructions.

Remote Viewing Request

Members of the public may request to remotely view this oral hearing. If resources are available, the Board generally expects to grant such requests.

In addition to remote viewing of an oral hearing, the USPTO Alexandria headquarters and the USPTO regional office locations in (1) Detroit, Michigan; (2) Dallas, Texas; (3) Denver, Colorado; and (4) San Jose, California are generally available for any member of the public to view a hearing, subject to room availability and advance coordination with the PTAB.

If Appellant objects to the Board granting such requests, for example, because confidential information may be discussed, the party must notify the Board by contacting PTABHearings@uspto.gov at least five business days prior to the oral hearing date.

Legal Experience and Advancement Program

The Board has established the "Legal Experience and Advancement Program," or "LEAP," to encourage advocates before the Board to develop their skills and to aid in succession planning for the next generation. The Board defines a LEAP practitioner as a patent agent or attorney having three (3) or fewer substantive oral arguments in any federal tribunal, including PTAB. Whether an argument is "substantive" for purposes of determining whether an advocate qualifies as a LEAP practitioner will be made on a case-by-case basis with considerations to include, for example, the amount of time that the practitioner argued, the circumstances of the argument, and whether the argument concerned the merits or ancillary issues.

Appellants are encouraged to participate in the Board's LEAP program. Appellant may request that a LEAP practitioner participate in the program and conduct at least a portion of the oral argument. In exchange, the Board will grant up to fifteen (15) minutes of additional argument time, depending on the length of the proceeding and the PTAB's hearing schedule. Appellant should submit a request and LEAP verification form no later than at least five (5) business days before the hearing, by email to the Board at PTABHearings@uspto.gov. A combined LEAP Practitioner Request for Oral Hearing Participation and Verification Form is available on the LEAP website, www.uspto.gov/leap.

A LEAP practitioner may conduct the entire oral argument or may share time with other counsel, provided that the LEAP practitioner is offered a meaningful and substantive opportunity to argue before the Board. Appellant has the discretion as to the type and quantity of oral argument that will be conducted by the LEAP practitioner. Moreover, whether the LEAP practitioner conducts the argument in whole or in part, the Board will permit more experienced counsel to provide some assistance to the LEAP practitioner, if necessary, during oral argument, and to clarify any statements on the record before the conclusion of the oral argument. Importantly, the Board does not draw any inference about the importance of a particular issue or issues, or the merits of Appellant's arguments regarding that issue, from the Appellant's decision to have (or not to have) a LEAP practitioner argue.

In instances where an advocate does not meet the LEAP eligibility requirements, due to the number of "substantive" oral hearing arguments, but nonetheless has a basis for considering themselves to be in the category of advocates that this program is intended to assist, the Board encourages argument by such advocates during oral hearings. Even though additional argument time will not be provided in such circumstances, as with LEAP, an Appellant may request to share time with counsel and the Board will permit more experienced counsel to provide some assistance, if necessary, during oral argument, and to clarify any statements on the record before the conclusion of the oral argument.

As always, all practitioners appearing before the Board shall demonstrate the highest professional standards. All practitioners are expected to have a command of the factual record, the applicable law, and Board procedures, as well as the authority to commit the party they represent. The Board discerns that it is often LEAP practitioners who have the best understanding of the facts of the case and the evidence of record, and the Board encourages their participation. Examples of the issues that a LEAP practitioner may argue include claim construction argument(s), or patentability argument(s) including, e.g., analyses of prior art or objective indicia of non-obviousness.

Special Requests

If Appellant has any special requests related to appearing at the oral hearing, Appellant should inform the PTAB. Special requests may include accommodations for deaf or hard-of-hearing individuals and blind or low vision individuals. Additionally, Appellant may assist the PTAB by indicating ways to accommodate the special requests. The PTAB will make every effort to accommodate the special requests in the manner suggested by Appellant.

Submission of Appellant's Demonstratives

Demonstrative exhibits are neither required nor expected, but Appellant may use them to assist in the presentation of its case. If Appellant has any Power Point slides or other demonstratives, they must be submitted for inclusion into the record at least ten (10) business days before the hearing date by submitting them through the USPTO Patent Center available at https://patentcenter.uspto.gov. If demonstrative exhibits are provided, they must not include any information not previously made of record in this proceeding, and the Board will refuse to allow the use of demonstrative exhibits that do not comply with this requirement. *See, e.g.,* 37 C.F.R. § 41.47(e)(1), (2). In addition, a party must clearly mark all demonstratives with the words "DEMONSTRATIVE EXHIBIT – NOT EVIDENCE" in the footer.

Submission of Appellant's Response to the Notice of Hearing*

To return a completed APPELLANT RESPONSE TO NOTICE OF HEARING, Appellant may use one of the following transmittal methods:

1. By the USPTO Patent Center, available at https://patentcenter.uspto.gov
2. By USPS first class mail to the PTAB mailing address:
   Patent Trial and Appeal Board
   United States Patent and Trademark Office
   P.O. BOX 1450
   Alexandria, Virginia 22313-1450

In all communications relating to this appeal, please identify the appeal number along with the underlying application number.

Questions

For further information about hearings, see 37 CFR § 41.47 and the Hearings section of the PTAB webpage: http://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/hearings. Also, for questions, please contact the PTAB Hearings Clerk at 571-272-9797.

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

FISH IP LAW, LLP
19900 MacArthur
Blvd, Suite 810
Irvine, CALIFORNIA
92612

Appeal No:	2024-003078
Appellant:	YAKKOV MERLIN
Application No:	17/867,612
Hearing Room:	Alexandria: Room A
Hearing Docket:	Mechanical
Hearing Date:	Wednesday, September 04, 2024
Hearing Time:	1:00 PM ET
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia** **22313-1450**

APPELLANT RESPONSE TO NOTICE OF HEARING

Appellant responds to the NOTICE OF HEARING in the above-identified appeal.

Hearing Attendance Options (please select one)

( ) I elect an IN-PERSON hearing and will appear at a hearing room in the following USPTO office:

( ) ALEXANDRIA, VA - 600 Dulany Street
( ) DALLAS, TX - 207 South Houston Street
( ) SAN JOSE, CA – 26 S. Fourth Street
( ) DETROIT, MI - 300 River Place Drive
( ) DENVER, CO – 1961 Stout Street

( ) I elect a remote VIDEO hearing and will appear from a non-USPTO location that I secure for myself.

( ) I elect a TELEPHONIC hearing.

( ) I WAIVE the hearing.

( ) I am requesting to RESCHEDULE the hearing. **A separate paper must be filed.**

Conflicts

To aid the judges assigned to the appeal in determining whether any conflicts exist that may require a recusal, please list the names of any additional person(s) who will be participating in the oral hearing and their affiliation with Appellant.

_____

_____

Special Requests

If Appellant has any special requests related to appearing at the oral hearing, please list those requests. Special requests may include accommodations for deaf or hard-of-hearing individuals and blind or low vision individuals. For any special request, please indicate any ways that the PTAB may accommodate the special request.

_____

_____

For any questions regarding Appellant's response to the NOTICE OF HEARING, Appellant may be reached via the contact information provided below.

Typed or Printed Name of Attorney/Agent/Appellant	Registration No.
E-Mail address	Phone number
Signature of Attorney/Agent/Appellant	Date

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 08/13/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
08/13/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YAKKOV MERLIN

Appeal 2024-003078
Application 17/867,612
Technology Center 3900

Before Deputy Clerk, Hearing Operations.

ORDER GRANTING REQUEST FOR TELEPHONIC HEARING

An oral hearing before a merits panel of the Patent Trial and Appeal Board has been scheduled to be included in the session of hearings commencing **Wednesday, September 04, 2024 at 1:00 PM ET** in Hearing Room A in Alexandria, Virginia. A Telephonic Oral Hearing has been granted.

This appeal hearing is set to be heard in a session of oral hearings beginning at **1:00 PM ET. PTAB Hearings will provide Appellant with connection information prior to the hearing**. The Board will provide a court reporter and a transcript of the call will be entered into the record. All other expenses involved with the Telephonic Hearing, such as the cost of the call, must be borne by Appellant.

The panel will have access to all papers in the record. During the oral hearing, Appellant is advised to identify clearly and specifically all papers referenced (e.g., page of Appeal Brief; portions of a patent by column and line numbers) to ensure the clarity and accuracy of the court reporter's transcript. In addition, Appellant is advised to identify themselves each time they speak. Furthermore, the remote nature of the oral hearing may also result in an audio lag, and so Appellant is advised to observe a pause prior to speaking, so as to avoid speaking over others.

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CALIFORNIA 92612

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	**08/14/2024 03:41:43 PM Z ET**	**103692.0001US4re**

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Braden Clark
PATENT CENTER #	66786718	FILING DATE	07/18/2022
CUSTOMER #	24392	FIRST NAMED INVENTOR	Yakkov MERLIN
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	Robert Fish

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Appeal_2024-003078_Appellant_Confirmation_of_Hearing_APCH.pdf	2	Confirmation of Hearing by Appellant	199 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
Appeal_2024-003078_Appellant_Confirmation_of_Hearing_APCH.pdf	B47E3FC63F8B8EC8E997E71E9B578F3DB3638C07C06F07F82F6974232EE212F06B4F3B80EFB219ADE68741F7EAEC2132EC7C4802D2B0C41C5EA4F364538A1174

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as

described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

FISH IP LAW, LLP
19900 MacArthur
Blvd, Suite 810
Irvine, CALIFORNIA
92612

Appeal No:	2024-003078
Appellant:	YAKKOV MERLIN
Application No:	17/867,612
Hearing Room:	Alexandria: Room A
Hearing Docket:	Mechanical
Hearing Date:	Wednesday, September 04, 2024
Hearing Time:	1:00 PM ET
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia** **22313-1450**

APPELLANT RESPONSE TO NOTICE OF HEARING

Appellant responds to the NOTICE OF HEARING in the above-identified appeal.

Hearing Attendance Options (please select one)

( ) I elect an IN-PERSON hearing and will appear at a hearing room in the following USPTO office:

( ) ALEXANDRIA, VA - 600 Dulany Street
( ) DALLAS, TX - 207 South Houston Street
( ) SAN JOSE, CA – 26 S. Fourth Street
( ) DETROIT, MI - 300 River Place Drive
( ) DENVER, CO – 1961 Stout Street

(x) I elect a remote VIDEO hearing and will appear from a non-USPTO location that I secure for myself.

( ) I elect a TELEPHONIC hearing.

( ) I WAIVE the hearing.

( ) I am requesting to RESCHEDULE the hearing. **A separate paper must be filed.**

Conflicts

To aid the judges assigned to the appeal in determining whether any conflicts exist that may require a recusal, please list the names of any additional person(s) who will be participating in the oral hearing and their affiliation with Appellant.

_____

_____

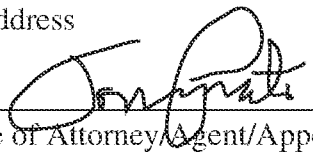
Special Requests

If Appellant has any special requests related to appearing at the oral hearing, please list those requests. Special requests may include accommodations for deaf or hard-of-hearing individuals and blind or low vision individuals. For any special request, please indicate any ways that the PTAB may accommodate the special request.

_____

_____

For any questions regarding Appellant's response to the NOTICE OF HEARING, Appellant may be reached via the contact information provided below.

Tomas A. Prieto	60,675
Typed or Printed Name of Attorney/Agent/Appellant	Registration No.
tprieto@fishiplaw.com	949-943-8329
E-Mail address	Phone number
	August 9, 2024
Signature of Attorney/Agent/Appellant	Date

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 08/15/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
08/15/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YAKKOV MERLIN

Appeal 2024-003078
Application 17/867,612
Technology Center 3900

Before Deputy Clerk, Hearing Operations.

ORDER GRANTING REQUEST FOR VIDEO HEARING

An oral hearing before a merits panel of the Patent Trial and Appeal Board has been scheduled to be included in the session of hearings commencing **Wednesday, September 04, 2024 at 1:00 PM ET** in Hearing Room A, in Alexandria, Virginia. Appellant filed a request that the oral hearing be conducted via Video Hearing from a non-USPTO location. Accordingly, the request has been granted.

This appeal is set to be heard in a session of hearings beginning at **1:00 PM ET. PTAB Hearings will provide Appellant with connection information prior to the hearing**. The Board will provide a court reporter and a transcript of the video will be entered into the record. All other expenses involved with the Video Hearing, such as the cost of the call, must be borne by Appellant.

The panel will have access to all papers in the record. During the oral hearing, Appellant is advised to identify clearly and specifically all papers referenced (e.g., page of Appeal Brief; portions of a patent by column and line numbers) to ensure the clarity and accuracy of the court reporter's transcript. In addition, Appellant is advised to identify themselves each time they speak. Furthermore, the remote nature of the oral hearing may also result in an audio lag, and so Appellant is advised to observe a pause prior to speaking, so as to avoid speaking over others.

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CALIFORNIA 92612

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 09/13/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
09/13/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

RECORD OF ORAL HEARING

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YAKKOV MERLIN

Appeal 2024-003078
Application 17/867,612
Technology Center 3900

Oral Hearing Held: September 4, 2024

Before JOHN A. JEFFERY, JENNIFER L. MCKEOWN, and MICHAEL J. ENGLE, *Administrative Patent Judges*.

APPEARANCES:

ON BEHALF OF THE APPELLANT:

TOMÁS PRIETO, ESQUIRE
Fish Ip Law, LLP
19900 MacArthur Blvd.
Suite 810
Irvine, CA 92612
(949) 943-8300
tprieto@fishiplaw.com

The above-entitled matter came on for hearing on September 4, 2024, commencing at 1:00 p.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia via video conference.

PROCEEDINGS

- - - - -

JUDGE JEFFERY: Okay, thank you very much. This is Judge Jeffery here and welcome to the hearing. We have Judges McKeown and Engle joining us remotely here for this video hearing. And a couple of housekeeping announcements before we get started. First, our primary concern is your right to be heard. So, if any time during the proceeding you have technical difficulties, that kind of thing, that undermines your ability to represent the client, then just let the team members know that established the connection and we can iron those things out.

Second, when you're not speaking, we'd appreciate if you mute yourself. That way, it'll cut down on the noise, the ambient noise, that the reporter can get a more accurate transcript. Also, along those lines, we'd appreciate if you identify yourself before you speak so we know who you are and the reporter can get an accurate transcript there. And just know also that we have the entire record in front of us, including any demonstratives and anything in the record we basically have here on our computers. So just know that.

And then lastly, there may be members of the public that might be listening to the hearing. So, with that, you'll have 20 minutes, and you can begin whenever you like.

MR. PRIETO: Okay. Thank you very much. First of all, thank you to all of you for your time. My name is Tomas Prieto and I represent the appellant in application 17867612. And I have a bit of a story to prepare

to tell you here today. But given that you've got the record in front of you and depending on your familiarity with it, I wondered if it might be easier or better if you have any immediate questions for me about this. Otherwise, I can begin by telling you kind of how we got here and what we''re looking for resolution on.

JUDGE JEFFERY: Okay. Well, this is Judge Jeffery here. Well, I appreciate that. That certainly expedites things -- we can go right to the questions. I do have several questions for you here. My understanding is we have a 112 rejection that's at issue here, an indefiniteness 112 second paragraph, if you will, rejection. So, my understanding of the examiner's rejection is this notion of an ""overlay activation criterion"" in the claim that is giving rise to the problem, at least according to the examiner in the claim. And so, I guess right off the bat here, my first question goes to just that notion of an "overlay activation criterion." And first, in trying to determine what that means exactly. Because after all, we have to construe the claim as a whole and then which of course involves that term.

But the first issue as I see it here is essentially trying to understand what that term means, and my understanding is that there were two cases, a District Court case involving this issue, and then a CAFC decision both holding the claims indefinite and because of the "overlay activation criterion." And both courts did note an inconsistency as I understand it with respect to the source of the ""overlay activation criterion"" being on the one hand and independent claim 1, it was from the internet, and on the other hand in the dependent claims 9 and 20, it was from the user''s premises. So, you had a irreconcilable inconsistency there. I fully appreciate that notion

there and you're canceling Claims 9 and 20 to remove that inconsistency. But what I wanted to do here is take a sort of a broader picture here so I just can wrap my head around what that term means because, as the Federal Circuit pointed out, it's not defined anywhere, it's not mentioned anywhere in the specification. The prosecution history doesn't shed any light on it. So, understandably the court was challenged by trying to wrap their heads around what this term means. So, understandably we are too. But what I wanted to first ask you is what exactly is an "overlay"? Because after all, the criterion calls for activating this overlay under certain conditions, presumably.

So, it really comes -- the first question I have is, what is an "overlay"? And I -- before you answer that, I do note that both courts did discuss, at least briefly, what an overlay is. And the first instance that I could find was in the -- well, the Federal Circuit decision that refers to Figures 7A to 7C of your -- of the Patent, the '969 Patent there. And I'll just read from the decision just to put it in context. The Federal Circuit says, early on in the decision, "two phrases are at issue here, 'overlay activation criterion' and 'overlay activation signal.' In the claims, these phrases relate generally to producing overlays." And then they say, "e.g., Figure 7A to C above." So, when I go to Figure 7A to C in the '969 Patent, what I see is various views here. I suppose Figure 7A is a television screen that's showing me a primary window at 41. And I see icons there, 42 to 44. So, the Federal Circuit is referring to this figure as showing an overlay. And also Figure 7B, which has the three icons, 42 to 44, and then a secondary window, 45 that's off to the right there, a smaller window. And then in

Figure 7C, we have an enlargement essentially of the whole screen as Figure 4 is secondary window 45. And so, that's the CAFC's identification of overlays.

So, essentially the elements of Figure 7A to 7C, which are the icons and both windows. And then I go to the District Court decision, which early on in that decision, and I'll just read from that decision, it says, "according to the specification, if a user wishes to view the content represented by a particular *overlay*"—emphasizing that word---for example, item 42"— and that would be the icon in the Figure 7A-7C—she may use a particular key on her remote control to select the desired overlay, which will result in the display of a secondary window item 45." The only reason I bring this up is the District Court refers to an "overlay" certainly explicitly with respect to an icon in that particular passage, not the secondary window item 45.

And then lastly, the District Court, right before that actually, in Roman numeral one of their decision, I'll just read the relevant part of it here, it basically says that "[a]ccording to TVnGO, the main inventive feature of its technology to which the Patents-in-Suit are addressed is the generation and display of 'overlays,'"quote unquote, "which appear on a user's television screen." And then you drop down there and they refer to, for example, in Figures 7A, 7B, and 7C of the Patents in Suit, which depict a television set, item 40, items 42 through 45 are overlays or icons containing internet content. Okay. So, at least in that passage, the District Court is referring to items 42 to 45 as overlays or icons. So, I see items 42 to 44 as being icons. But what about that element 45? Is the District Court saying

that's an icon there?

So, you can sort of see the difficulty I'm having here with respect to just nailing down exactly what an overlay is. So, I'll go ahead and hand it back over to you to flesh that out.

MR. PRIETO: Absolutely. And before we get too far into this, I wanted to raise that with regard to the items before the Board, there's the rejection, as you pointed out, and also something that both the examiner and I agree would be a great help for us if the Board could address, which is the potential issue of broadening. The examiner had issued a rejection under 35 U.S.C. 251 and withdrew it in the after final right before the appeal. But that's something that I'd like to address at the tail end of this if I could for a little bit.

Now, with regard to your question about the overlays, my understanding from reading the Patents and everything is just an overlay is a graphic that's placed on the screen over, but would normally be behind it, right, and that can be in the form of an icon but it can be a form of a larger window. I think the icon would be a type of overlay -- a window would also be a type of overlay. But the overlay in general would just be a graphic or some other imagery displayed over the normal imagery that goes behind it. That's my understanding.

JUDGE JEFFERY: Okay. Thank you for that, counsel. This is Judge Jeffery here again. So, when I'm looking at Claim 1 then, where you're referring to "overlay activation criteria," that overlay activation could be I'm either activating an icon or I'm activating another type of screen? Is the claim limited to one type of overlay or is it any type of overlay?

MR. PRIETO: My understanding is that it could be any type of graphical overlay.

JUDGE JEFFERY: Okay. Judge Jeffery here. Okay. Thank you very much, counsel. So, we're talking about possibly activating an icon, at least in one scenario, or possibly activating a secondary window, for example, for like 45 in your Figure 7?

MR. PRIETO: That's right. And the issue that brought us here is really this discrepancy pointed out by the District Court. And in coming to you for help with this, I think I need to recognize the examiner's difficulty in this because the courts, as we all know, apply a different standard when they decide these things, right? And then when we look at it with traditional PTO practice in terms of claim construction and then everything else, I think the examiner's hands were a little bit tied because we can't override the court's decisions here. Instead, what our challenge was is to make amendments that would be following the court decision, but present new set of facts for the examiner to consider. That's why we canceled the claims, the dependent claims that we did is because the District Court tied very closely the language of Claim 1 to the language of Claim 9 for the discrepancy of where this "overlay activation criterion" comes from. That's the ambiguity that led to the indefinite mis-decision.

JUDGE JEFFERY: This is Judge Jeffery here. Thank you, counsel. But that wasn't the -- is that the only reason the claims were indefinite because you had the inconsistency? Or was there perhaps another reason the claims were indefinite? In other words, could it be said that now that we know clearly and unambiguously that the *source* of the overlay

activation criteria must be from the Internet. I mean, that's clear and unambiguous with your cancellation of the claims. Seems to me now the real dispositive question in this appeal is, do we know what an "overlay activation criterion" is now? Now, we know where it comes from, but what is it exactly? And the reason I emphasize that is the CAFC, the Federal Circuit, noted that you couldn't just take, stitch together, if you will, a definition of "overlay." You take the word "overlay." You pull out a dictionary definition. Okay, "overlay" by its plain meaning means this. Okay, then I take a dictionary, and then I look up the word "activation." And I get a plain meaning for "activation." And then I take a dictionary and I look up the meaning "criterion." So, I have three definitions of words that certainly have in their ordinary everyday parlance. I think we all pretty much understand what those things mean in everyday usage. But the court said that you couldn't do that with this term. You couldn't just merely stitch together the plain meanings of the constituent words of the term "overlay activation criterion." So, it begs the question then, how do we construe what an "overlay activation criterion" is?

MR. PRIETO: Well, I think that in my understanding of the decisions and then the Patent as a whole, is they did raise questions about that. But what really they got stuck on is the source of where this comes from. I mean, I think they, as I read it, got close enough to understanding what it could mean to sort of move past that and to the issue that they raised is, okay, the claims as written taken with the totality of the evidence, including the spec and the prosecution history, left it unclear. And they tied all of the claims together, Claim 1 with the dependent claims, which

normally in prosecution practice in front of the office we wouldn't do, but that's what the court did here. And --

JUDGE JEFFERY: This is Judge Jeffery here, counsel. Well, the reason, my understanding, the reason they went to claims 9 and 20 to attempt to construe the term is they were at a loss to getting any guidance as to how to construe the term. You know, they went -- the single best guide is the specification, right? So, they went to the specification, they were unsuccessful in gleaning the meaning of the term from that. They went to the prosecution history. That too was unhelpful. So, they went to the other claims in an attempt to construe that, and that's when they ran into the inconsistency. But the real question that I have here is, and it begs the question to me, is that even though we know the source now of the "overlay activation criterion", if the court would have known the source of it in their decision, could they have then stitched together the ordinary meanings of the terms "overlay," "activation," and "criterion," of all three of those things, which they said they couldn't do, if they know the source of it now. In other words, if you had -- if those claims would have been canceled would they have been able to construe the term by stitching together its ordinary meanings of the constituent words?

MR. PRIETO: I think so. I think that it's notable that the courts did not invalidate this for lack of enablement or written description. They only did through indefiniteness. And likewise, the examiner's prosecution followed the District Court and the CFC decisions.

JUDGE JEFFERY: But counsel, this is -- that's a [INDISCERNIBLE], this is Judge Jeffery here, that's an interesting point on

written description and enablement you raised there. Was that argument ever made in the corresponding litigation that gave rise to the District Court decision?

MR. PRIETO: That I'm not sure about. I don't know that it, because I was, I've been mostly focused on what I have in front of me with regard to, you know, the examiner's rejections, right? And then trying to reconcile that with the court decisions with the rejections that we have in front of us.

JUDGE JEFFERY: Well, thank you, counsel. This is Judge Jeffery here. Well, that, if we don't know exactly if the argument was made or below or not, I can only assume it was not made. And if that's the case, then the court would have had to have raised that *sua sponte*, if you will, which I suppose they could have done. The examiner did not reject the claims as under 112 first paragraph written description or enablement. So, those issues would be first here, right? If they're bring -- that would be the first time they would be addressed, if you will, either here or some other tribunal. But they weren't raised in the other tribunals here, but, and the examiner didn't reject the claims under those grounds. But we do have a indefiniteness.

MR. PRIETO: Yes.

JUDGE JEFFERY: And as I see it, we're still left with the question of what exactly is an "overlay activation criterion". And the court struggled, both courts struggled to understand the meaning of that term given the limited evidence on this record -- on the records that were before the court at that time, either court at that time, as to what those terms meant.

So, there are clearly, there's clearly difficulties there in ascertaining that meaning. But now that we know the source of that "overlay activation criterion," we're still left with the question, what is it exactly? What is an "overlay activation criterion"? And as a related question I have for you, is the claim says that the "overlay activation criterion" is essentially one of three components of an overlay enabling digital data, overlay enabling digital data. So, we have overlay enabling digital data that comprises overlay activation criteria. I want to focus on the two words that are different in those two terms. One says "overlay *enabling* digital data." I'm emphasizing the word "enabling" there. The other term says "overlay *activation* criterion." Two different terms there. Why are they different, number one, and does it make a difference in terms of the scope of the claim?

MR. PRIETO: I think they are different because the overlay enabling digital data is the package that includes the web link and the image that is going to be displayed and the criterion. The criterion, as I understand it, is just the trigger signal, or the trigger or condition that the computer would need to launch those and display them. And so, the "overlay activation criterion" is part of the digital package, if you would, that is the overlay enabling digital data.

JUDGE JEFFERY: Thank you, counsel. Judge Jeffery, here again. Well, what's the difference between enabling and activating?

MR. PRIETO: Enabling is that it makes it possible, and activating is that it actually happens, right? For example, your phone is enabled to receive phone calls, but until it receives a signal from a cellular tower that

causes it to ring for you to answer, that's the activation.

JUDGE JEFFERY: Okay. Judge Jeffery, here again. Thank you very much, counsel. And I wanted to ask you, too, about the support for the "overlay activation criterion" that you provide in your brief, and specifically in the summary of the claimed subject matter. That's always a very helpful source for us at the Board to determine, you know, where these things are supported in the disclosure, and helps us determine, you know, find these things very quickly, and we really appreciate it when Appellants give us that information in the summary. So, in your summary of the claimed subject matter, I'm on page four of your appeal brief, you quote the -- you list the claim there, and then right around the middle of independent claim 1 and item A there, it says, the overlay enabling data includes at least a web link, an image indicative of content associated with the overlay enabling digital data, and an "overlay activation criterion". And then you cite column 5, lines 29 to 44, and column 7, line 62 to column 8, line 15. So, I take it those are the only two places in the '696 Patent that, or excuse me, '969 Patent, that disclose the "overlay activation criterion"?

MR. PRIETO: Yeah, I think so. I'm just reviewing those sections real quick. Yeah, I believe those are the sections that most specifically get to that.

JUDGE JEFFERY: Okay. Judge Jeffery here. Thank you very much, counsel, for that. So, let's go to those sections just so I can wrap my head around what exactly this criterion, "overlay activation criterion" is from the passages that you provided. So, when I go to column 5, starting at line 29, we have a reference to Figure 4, which is a flowchart showing the

principal actions carried out by an IP content provider, such as an advertiser, for creating IP content for overlaying by the TV-internet integration box with a broadcast TV signal. And it goes on to talk about the advertiser designs, this advertisement, and it's intended for display, and so on and so forth, basically talking about what the advertiser does on their end. But it certainly does reference overlaying IP content. So, where exactly in that column 5, lines 29 to 44, is there an "overlay activation criterion"?

MR. PRIETO: I'm looking at this and I'm looking at the column or the -- and I'm wondering if there was a typo where it was meant to be column 4, because as I review this again, column 4 around that section talks about time, some time frames to display, like a timetable of what type of data to display when. And that would be specifically column 4, lines 36 approximately to 40. So, that would be an example of a criterion, right? The timetable that tells you what to display and when.

JUDGE JEFFERY: Okay. Judge Jeffery here. So, there was a typographical error? [INDISCERNIBLE]

MR. PRIETO: It looks like that, because the section on column 5 is less instructive than the same corresponding lines of column 4.

JUDGE JEFFERY: Judge Jeffery here. Okay. Thank you very much, counsel. Okay. So, let's take a look now at the column 4 passage here and you had indicated the timetable would be criterion for activating the "overlay activation criterion". So, we have in this passage a reference to Figure 3, Figure 3. So, it wouldn't hurt to take a quick look at Figure 3 to get while we're here so we can see what that shows. And when I look at Figure 3, I see a flowchart here that has a step, the second step down there

where it says check timetable and programmed events. So, that timetable, as I understand your position, that would be overlay activation criteria?

MR. PRIETO: Yeah, that would be an example of it. That's right. And in that same figure, and thank you for pointing to that figure, because I think it visually shows clearer than anything else, is there is that diamond there that says, do conditions match? Yes. And then overlay the data, right? And so, that would be the criterion being met to overlay the data.

JUDGE JEFFERY: Okay. Judge Jeffery here again. Thank you, counsel, for that. So, do conditions match? So, that conditions matching. So, we're talking about the conditions in the timetable. Is that correct?

MR. PRIETO: Well, I mean, conditions could be general, but the example in that passage, yeah, referred to a timetable.

JUDGE JEFFERY: Okay. Judge Jeffery here again. Thank you very much, counsel. And then if the conditions match, then we overlay the data. Now, is that data, or that would be an overlay? Clearly, it's overlaying something. And would that data be an icon?

MR. PRIETO: It could be. I think it could be an icon or other overlayed data. You know, I think an icon is a type of overlay, as we were talking about earlier. But there, you know, I don't think that it's expressly limited to that. I think a little bit further down, I have the patent pulled up on the website. Let me just find a specific line where it says the subscriber can respond to the overlay data using a remote, which is program to interact with the displayed icon or other data that is overlaid on the TV broadcast. And let me give you the exact line for that. That would be starting on the column, same column 4, but starting line 58, approximately, to, let's see,

yeah to 62-ish. So, column 4, lines 58 to 62, where it contemplates that the overlay can be an icon or other data.

JUDGE JEFFERY: Okay. Counsel, Judge Jeffery here again. Thank you very much for that. That's very helpful. And I wanted to, along those lines, since this does talk about overlaying an icon or other data, so clearly, you're overlaying not just an icon, but it could be something else. I wanted to ask you about this disclosure in the context of Figures 7A to 7C, because both courts referred to these Figures 7A to 7C. They were clearly important to both tribunals in arriving at their decisions and describing what this patent's all about. So, I keep, if I sound repetitious in this regard about referring back to Figures 7A to 7C, I think it's important, because it was important to those courts, and so it's important to us as well. And when I look at Figures 7A to 7C here, I see the icons that are displayed there. And my understanding is the user takes their remote control, and then once the icons are displayed there, they can select an icon, and then that will pop up the secondary window with the internet content in that window there. My question is, the icons themselves, 42 to 44, those we've already sounds like we've established that those are overlays. Are they -- do they appear on the screen when criteria is overlay activation criteria is satisfied? In other words, we just looked at Figure 3, the flowchart of Figure 3, and we have some conditions, if conditions match then you overlay the data. Would that be the icons here, 42 to 44? Would they be overlaid? In other words, they would appear on the screen when the criteria is satisfied?

MR. PRIETO: I believe so, yes. I think a current example of this and, you know, a more modern example, in terms of just what it might look

like, right, not necessarily with respect to function. I don't know how the underlying technology works is when you reach the end of a YouTube video, I don't know if you're familiar how it'll sometimes provide suggestions of other things to watch in smaller windows while the video you're watching is finishing up. I think Disney Plus does something similar when you're ending an episode of something and it'll pop up the next one for you to -- you can click on it to go to the next episode. Those are our current examples of how it might look, right, and what the figure I think are getting to where these are overlaid in response to the criteria as discussed in relation to Figure 3. And then the user can use the remote to click on them and then they can become the larger window.

JUDGE JEFFERY: Okay, counsel. This is Judge Jeffery here again. Thank you very much for that. I do have a question going to your argument about the Federal Circuit's passage that the examiner relies on about essentially the notion of invalidity and the fact that, at least in that case, is my understanding is the Federal Circuit basically said that, you know, even if we dismiss the claims as invalid under 112, that, you know, a skilled artisan would still discover the inconsistency. In other words, that's not going to magically -- the prosecution history doesn't magically disappear. You know, this inconsistency will be remaining, and that seemed to be -- so that notion of the fact that it's -- that the claim would be invalid because it's facially inconsistent, if you will, with the independent claim, that really did matter to the CAFC. And my understanding is you're distinguishing that by saying that, well, the court said nothing about *canceling* the claims. It was about just determining *invalidity*. And along

those lines, I had a question specifically on your argument in that regard, where this, and this is on page 10 of your appeal brief, 10 of your appeal brief, where you say, a court finding the claims invalid is not the same thing as canceling claims during a USPTO proceeding. A court can declare patent claims invalid during a proceeding, and then you conclude and you say in the last sentence, "a court does not have the power to cancel or amend patent claims." And that's the sentence I wanted to focus on. "A court does not have the power to cancel or amend patent claims." And my first question to you on that point is, is there any authority that supports that proposition?

MR. PRIETO: I don't have any authority handy. When -- and the examiner and I spoke several times. The examiner has been very willing to work with us on this one. And what I was trying to do in this is distinguish the fact that the claims declaring them as invalid was not the same thing as saying you couldn't cancel the claims. And that was a relatively a small point that we went back and forth on because --

JUDGE JEFFERY: But, counsel, this is Judge Jeffery here.

MR. PRIETO: Yes.

JUDGE JEFFERY: Well, how can you say a court doesn't have the power to cancel or amend patent claims? You make that statement very definitively. What basis do you have to say that?

MR. PRIETO: I don't have any basis that I can give you right now. I know that I researched the point, but I don't have the citation, and I wish I had saved it in my research. And I was trying to highlight --

JUDGE JEFFERY: Judge Jeffery here.

MR. PRIETO: Yeah.

JUDGE JEFFERY: That's fine, counsel. Thank you for that. But the PTO does have the power, --

MR. PRIETO: Exactly.

JUDGE JEFFERY: -- as I understand it from your argument, that that is essentially exclusive to a PTO proceeding.

MR. PRIETO: Right.

JUDGE JEFFERY: And so, the court didn't contemplate cancellation because they couldn't do it?

MR. PRIETO: That's right. That's right.

JUDGE JEFFERY: They couldn't do it. Then in that matter --

MR. PRIETO: [INDISCERNIBLE] the possibility of --

JUDGE JEFFERY: This is Judge Jeffery here, and along those same lines, a court by this logic wouldn't have the power to even delete any terms at all from a claim, right, because they don't have the power to amend?

MR. PRIETO: That's right. So, they construe the claims and then make their decision based on their claim construction. But in terms of amending the actual language of the claim, my understanding is that that is the sole purview of the office through, you know, proceedings such as reissue and the other types of post-grant proceedings that exist.

JUDGE JEFFERY: All right. Judge Jeffery here. Thank you very much, counsel. And you can go ahead and proceed with your argument.

MR. PRIETO: Okay. No, thank you for that. And with regard to, you know, the main crux of the examiner's rejection, is first that the claims themselves, following the cancellation, resolved that ambiguity that the

District Court raised. That's our position. Because when reading of the claims, there is no other source, potential source for this "overlay activation criterion." And the court actually was pretty clear that in claim 1, it's expressly from the internet. And it's only when you read the dependent claims that the court said, actually, you know what? We read this, we look at this back, and we can't figure out where this comes from, so it's indefinite. I think we've resolved that by simply canceling claims 9 and 20.

With regard to the intrinsic record, that the court refers to and that the examiner and I discussed quite a bit, I think when you look at the totality of the record following the court decisions, the intent of what the claims are supposed to mean is pretty clear. I mean, as you said earlier, Judge, ultimately it's about whether or not a person reading this down the road, if this reissues, will understand what the metes and bounds of the claims are. And based on the claims, the cancellation of the claims, what the courts decided and raised as being confusing. And then our remedial action taken here, including this discussion and all of the prosecution history, somebody reading all that will realize, okay, this "overlay activation criterion" only comes from the internet and not from anywhere else. And somebody with a potentially infringing method wouldn't be confused because they either have it coming from the internet where it's potentially a problem for them, or if it comes from the user's premises, that's not in the claims, so it wouldn't infringe. And it's logically impossible to have both as the courts pointed out. So, it would be one or the other and that would be pretty clear. You know, the -- and what we've tried to do with our responses in addition to amending the claims, because this is a little bit different in having to take

into account the court's decisions, it's not strictly the PTO business as usual with claim -- back and forth with the examiner. We've tried to clarify the record as much as possible with regard to the fact that reading the totality of everything once all is said and done, it will be clear that the "overlay activation criterion" only comes from the internet and not from the user's premises.

JUDGE JEFFERY: Well, thank you, counsel. This is Judge Jeffery here again. I do and that's very helpful. Thank you. I do have another question going to the support that was cited for the "overlay activation criterion". I know we discussed that earlier in connection with a typographical error in the -- the claimed subject matter section of your brief, and then we've clarified that as referring to column 4. But you also, in the summary of the claimed subject matter section, cite a passage from column 7 into column 8, essentially the paragraph that bridges columns 7 and 8 of the '969 Patent. And I wanted to ask you about that as well. And that talks about the second data containing the display information for the icons and so on and so forth. And then there's a Table 1 there at the top of column 8 that is entitled "Second data - definition," and it gives a location of the icon there, "icon.gif," and then there's some channels, start times, and then a website of the IP content. And then the passage below that, basically starting at line 8 down to line 15 or so, talks about those elements in the table there. So, you also referred to this as support for the "overlay activation criterion" on page 4 of your brief. So, my question is, is there anything in that passage that specifically identifies an "overlay activation criterion"?

MR. PRIETO: Well, it, you know, similar to what we had discussed before, they do indicate the start times. And so, I would say that the start times for presenting content would be a criterion, right? Once that time hits, the content is displayed. So, I think that would be a criterion.

JUDGE JEFFERY: Okay. Judge Jeffery here again. Thank you, counsel. So, if we're saying that an overlay is an icon, would that start time activate the icon? In other words, would it put that icon on my screen at that time so that I could click it and then view the movie or whatever it is at the start time? We'll take the first one there at channel 2, at 1930. So, at 1930 then, or 7:30 p.m., whichever one you want, that icon will then suddenly appear on my screen. Is that how that works?

MR. PRIETO: I think that's one interpretation of it. And I think your interpretation makes sense. I'm trying to see right here if it's clear about whether or not that's the icon that appears or if it's the content related to the icon. But either way, it would be an overlay, right? The icon is an overlay, but the overlay includes other types of data too. So, regardless of whether it was the icon that was generated at that time or some subsequent content, it would still be an overlay in response to the criteria.

JUDGE JEFFERY: Okay. Judge Jeffery here again. Thank you very much, counsel, for that. I also wanted to ask you briefly here, I know we're over time, but this is an involved case with a lot of moving parts here. So, we're having to go a little over there, but we should be able to wrap this up directly here. So, thank you for your patience. Thanks for everyone's patience on this. But I wanted to ask you about the original prosecution history of this case. This, as I understand it, this patent stems from a

continuation or an application that is a continuation of a parent application with it also issued as a patent. And so, the original prosecution of the parent application is clearly relevant to the terms at issue here in terms of, you know, when they were introduced into the application and all of that. So, my understanding is in the original, and the application is 11/794,825, which is the parent application. And unless I'm missing something, correct me if I'm wrong, but my understanding is the first time the term "overlay activation criterion" was introduced into that application was in September of 2010 in that amendment that was made to the claims at that time.

MR. PRIETO: Yeah, I think you're right about that.

JUDGE JEFFERY: Okay. Thank you, counsel, for that. Judge Jeffery here again. Appreciate that. So, so -- so, that was the first instance. And then the amendment that was made, just so I understand the nature of the amendment. I know it's very involved. We don't have time to go into all the details of that. But the overall gist of it was to replace instances of the term "second data" with "overlay enabling data." I know there's a lot more to the amendment than that. I'm not trying to oversimplify the amendment. But what I'm trying to do is sort of understand the motivation or the rationale behind the amendment. In other words, why was the claim amended to replace instances of "first data" and "second data" with things like "overlay enabling data" and then this "overlay activation criterion" that didn't exist in the disclosure at all? So, what was the reasoning behind that amendment?

MR. PRIETO: I'm not really sure. I reviewed the original prosecution, but we did not prosecute this, and I personally did not prosecute

this. And so, my approach to this, as you said, this is a complicated case. And when we had the -- there's a couple considerations here. One was being bound by the court's decisions. Second, another consideration is the fact that this was put into reissue outside of the two years' post-issuance. So, the nature of the amendments that we could make without triggering the broadening rejection was extremely, extremely limited. Taking that as it were, I -- my approach was to take this as presented post-judgment and work from there.

JUDGE JEFFERY: Well, counsel, this is Judge Jeffery here again. Well, my question goes to the parent application. This is before the reissue. This is before the court's decisions. This is during prosecution of the original parent application. So, the examiner rejects the original claims, which I understand that was the preliminary amendment that changed the claim somewhat, but nonetheless presented them originally. And then when those claims were examined back in, you know, before 2010, they were rejected. And then in response to that rejection, an amendment was filed. That's the amendment I'm interested in, the one that was filed in 2010, the September 2010 amendment, that really changed those claims a lot. That's the reason I'm emphasizing that. That was not just a minor tweak to the claims. That was, from what I can tell, a wholesale redrafting of the claims, adding things like "overlay activation criterion," and "overlay enabling digital data" for the first time in that application, which of course is now at issue before us here in this continuation application now in the reissue. So, that's the reason I'm raising this, because that was the genesis, if you will, of this whole notion of a quote unquote "overlay activation criterion" that is

now, you know, at issue. And so, my question is, to the extent you can answer it, is what was the reasoning? Why did you change the claim to what it was before to call for things that weren't in the specification, "overlay activation criterion"? It was basically a wholesale redrafting of the claim, adding a lot of things that weren't there originally.

MR. PRIETO: I don't remember. Quite frankly, I remember reviewing the prosecution history to the point to get a gist of how we got to where we were. But then our focus has been on sort of everything that happened after the litigation to try and save this one, right? And so, I don't remember what the -- what I --

JUDGE JEFFERY: Okay, counsel. This is Judge Jeffery here. Well, thank you for that. That's the only reason I bring it up. It was just such a major change. It was striking just how much there was in terms of a different approach to the claim, what the claim was suddenly calling for at that point. And, of course, the examiner, I mean, ultimately, right, it was allowed. The case was allowed and ultimately issued as a patent. But here we are now in reissue on appeal where we're talking about a term that was added many, many years ago that is suddenly -- everybody's wondering, what does this stuff mean exactly? So, that was the reason I was trying to ask you, well, what was the whole point behind that change? Because that might shed some light on what these things mean. But in any event, thank you for your candor and your response there. My only other question to you goes to maybe just an administrative point. I just want to clarify the record on something that I saw in the appeal brief that I'm sure has an explanation, but I wanted to bring it up here, is that there is on page 13 of the appeal

brief, page 13, about the first and second full paragraphs of that, it strikes me as notes for the drafter of the appeal brief. What I'm getting at is that the text there that's provided, there seems to be insertion points or something that are around various passages there that strike me as things that really weren't intended for public consumption, if you will. Maybe those were internal strategy notes or that kind of thing, but in any event, they wound up in the appeal brief and they do have public consumption. So, I just wanted to clarify the record. Was that intended or was that just unintended?

MR. PRIETO: The basic statements of there were intended. I'm not sure how it was that this version got filed instead of one that has more fleshed out arguments, but there wasn't anything that wasn't intended. It was relatively tail end arguments that were going to be included there for completeness's sake. But it wasn't anything that wasn't intended. Thanks for -- thank you for drawing attention to that because it's something that made my blood go cold when I saw it after the fact. But it wasn't anything that wasn't intended. It was just notes to add a little bit more verbiage and clean them up at the end. And unfortunately, the wrong version got filed. But this isn't something that was a huge concern in terms of the arguments.

JUDGE JEFFERY: Okay, counsel. Judge Jeffery again. Well, thank you very much for that. Yeah, just something I wanted to clarify the record on. I certainly, you know, can see the intent behind the comments there, but it struck me as internal only there, and that was going to be fleshed out more in a more formal way before the brief was filed, but for whatever reason it was filed as is. But, okay, thank you for that.

I do have one other question, and I think this will be my final one

here. But it goes to the point you raised earlier at the outset with respect to the broadening issue. My understanding is under -- the examiner had at some point along the way rejected the claims under section 251 as broadening beyond the two years. And that's, you can't do that under the statute. And that rejection has since been withdrawn. But my understanding is the examiner is essentially threatening, if you will, to reinstate the 251 rejection, depending on the outcome of this decision, I suppose. In any event, that issue is sort of lurking in the background, if you will. And I, and my understanding of your -- what you're asking us to do, and certainly in the reply brief on this point is asking for commentary on our end on the scope issue to essentially for compact prosecution to sort of streamline things. And while I appreciate the notion and then the request, doesn't that essentially request an advisory opinion on our part where you're asking us to comment on something that's not really an issue before us? Isn't that an advisory opinion?

MR. PRIETO: Well, yeah, I guess it might be. And this is where, you know, at first when the examiner withdrew the rejection, you know, you get that feeling of oh my, okay, we overcame one thing. And then as it became clear that the examiner had it kind of chambered in case you overturned the 112 second, I kind of wish he had stuck to his guns and, you know, maintained the rejection for you to consider formally. Because the examiner also in his answer, I think echoed our feelings that we really would love the Board's guidance on this so that we're not back here in X amount of years discussing that issue. In essence, what it comes down to is the examiner has admitted that the claim scope in terms of the verbiage is

fundamentally unchanged by what we've done. Cancelling Claim 9, we believe, clarifies the uncertainty that led to the indefiniteness. So, we think that claims are not definite. And the examiner's position is sort of the longstanding rule that claims indefinite cannot be infringed and then made definite could be infringed. Therefore, it's broadening. Our response to that is one, the examiner's admission that the claimscope has not meaningfully changed. And second, that there are instances where claims have been allowed for amendment to overcome 112 issues without it being considered broadening. You know, the District Court pretty categorically said that claim 1 requires the "overlay activation criterion" to come from the internet. So, there's no ambiguity intra-claim with claim 1, and with the other independent claim. And so, what we would like is just some guidance from you about that because, you know, I understand the examiner's position and his hands are sort of tied based on the longstanding rule. But I think this falls into that area where the amendments are so minor to the claim in terms of how the claim reads that it would be under that limited ability to amend to overcome an indefiniteness issue without triggering the broadening rule. You know, from a policy perspective, I think that the downside of this is if amendments this minor where the decision to reverse, right, to reverse the 112, if amendments this minor still trigger the broadening, then doesn't that serve as a warning to all Patent holders out there that do not enter reissue outside of two years? If you think you have a 112 issue, just let the courts find it. And if they don't, great, because it's impossible to fix at reissue.

JUDGE JEFFERY: Thank you, counsel. This is Judge Jeffery here again. Appreciate that. Just a general question here about the

cancellation of claims 9 and 20. You clearly canceled those claims responsive to the court's decisions in that regard to remove the inconsistency. So, that was essentially an error correction under Section 251, right? I mean, you're correcting an error in the patent by removing a facially inconsistent claim, set of two claims that were facially inconsistent. So, you're correcting an error, right?

MR. PRIETO: Right.

JUDGE JEFFERY: Okay. Judge Jeffery here again. So, and in effect, when you had claims 9 and 20, you were -- that were erroneous, everybody agrees there was a problem with claims 9 and 20. So, you're essentially claiming more than you had a right to claim. You corrected the error.

MR. PRIETO: I'm not sure I follow. Can you explain that differently?

JUDGE JEFFERY: One of the hallmarks of error correction under the reissue practice is, you know, you're identifying error to be corrected. And one of those errors is claiming *less* than you had a right to claim. In other words, that's the usual case. Usual cases, you know, there's a broadening there. You know, you broaden in reissue to get more, you know, more coverage because the patent issued because it claimed *less* than you had a right to claim. What I'm asking you is, you already had coverage for claim 1, and you had coverage for claim 9 in addition to claim 1. So, by taking out claim 9, you're essentially saying, and you've already said you're correcting an error. So, you're in effect correcting an error where you claimed *more* than you had a right to claim. And it was clearly erroneous. It

was inconsistent, but it was nonetheless more than you had a right to claim because it didn't make any sense. So, you took it out.

MR. PRIETO: If I'm understanding you correctly, then yes. That was an error where it was overreached a bit, and now we're correcting for that. And the overreach resulted in the confusion that led to the invalidity. Now --

JUDGE JEFFERY: Judge Jeffery here. Well, thank you, counsel. And that's a permissible error correction under Section 251. That's -- you can claim *more or less* than you had a right to claim, and that's an error that you can correct. And my recollection of the reissue procedures is you only need to specify one error in your reissue declaration to essentially trigger a reissue, to justify the reissue. So, even though it may -- this claiming more than you had a right to claim wasn't specified in the declaration, it's still nonetheless a valid error to correct by way of reissue as I see it.

MR. PRIETO: Yeah, I agree with you with my understanding of the purpose of all of this. And I think where the examiner I think is getting tied up is simply because of that sort of rule of thumb that's applied, right, with regard to indefinite claims as who could infringe before versus who could infringe after. That's it, because if this was in regular prosecution, right, without the court's decisions, I don't think anybody would say that we're broadening the claim by canceling a dependent claim. The independent claim is remaining identical in scope.

JUDGE JEFFERY: Judge Jeffery here. Well, I'll tell you the contrary, actually taking away something that you claimed before, which

seems to me was more than you had a right to claim, and now you're bringing that us to a point where that's the error that you corrected. Those are all the questions that I have. I appreciate your patience, time, and candor in answering the questions. I will now open it up to my colleagues on the panel. If there's any further questions from the panel, now would be the time.

JUDGE ENGLE: This is Judge Engle. The Federal Circuit also affirmed the same indefinite problem in the parent, the '220 Patent. I understand that's in reissue. What's the status of that reissue and how, if at all, does that impact this case?

MR. PRIETO: So, that one, we actually had an appeal. And then after we had filed that, this case came about and we had subsequent discussions with the examiner and felt that the arguments and the positions on both sides were more fleshed out. So, we request continued examination on that one, and that one's sort of waiting in the wings, pending whatever the decision is on this one. And we've discussed it with the examiner and the examiner is on board with that as well. I don't want to speak for the examiner, but my impression is that the examiner understands what we're trying to do as well.

JUDGE ENGLE: Thank you. No further questions from me.

JUDGE MCKEOWN: This is Judge McKeown, no questions.

JUDGE JEFFERY: Okay. Thank you very much. I think that is all we have for questions. I'll go ahead and turn it back over to you, counsel, for any final remarks to wrap it up, and then we'll adjourn.

MR. PRIETO: First of all, I want to thank all of you. As you said,

Judge Jeffery, this is not a typical case, and it's got a lot of twists and turns. Ultimately, though, I think the issues are fairly straightforward in the sense that ultimately with the cancellation of the claims, the claims are definite because taking in the claim language, but also in the totality of the record as the court pointed out as the examiner has mentioned, it's also clear what we're trying to do here, where the metes and bounds of the claim are now clear. The "overlay activation criterion" comes only from the internet and not from anywhere else, which is what caused the court's confusion and the indefiniteness.

And then with regard to the broadening, I hope that you'll provide some guidance on this so that we're not back here in a few years. And there, I think that the claims, you know, we haven't broadened. The scope has remained virtually identical. We've served to correct an error where we, as you pointed out, Judge Jeffery, initially got claim -- went after more than we were entitled to, and we're correcting that now. And so, I appreciate you for going over in the time and addressing this, giving this the importance that it deserves, and I look forward to your decision.

JUDGE JEFFERY: Okay. Judge Jeffery here. Very good. Thank you, counsel. And with that, the case is submitted and we're now adjourned and off the record.

(Whereupon the above-entitled matter went off the record at 2:05 p.m.)

PTABHearings@uspto.gov
571-272-9797 Date: October 21, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YAKKOV MERLIN

Appeal 2024-003078
Application 17/867,612
Technology Center 3900

Before Chief Clerk, Patent Trial and Appeal Board.

ORDER

On September 4, 2024, an oral hearing was held by videoconference. On September 13, 2024, the official transcript of said hearing was entered into the record. Appellant contacted the Board via email on October 16, 2024 and provided:

> "After reviewing the transcript, I found an error in the transcription that needs to be corrected to ensure that the record on this application remains clear. On page 27 of the transcript (page 28 of the PDF document), lines 2-3 reads "So, we think the claims are not definite." This section should read "So, we think the claims are not **indefinite**." (emphasis mine). As you can appreciate, the difference is subtle but significant."

The Board acknowledges this typographical error. No corrections will be made to the transcript of record. Appellant's email of October 16, 2024 is available as part of this Order and may be referenced in the future.

If there any questions pertaining to this Order, please contact the Patent Trial and Appeal Board at 571-272-9797.

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

Samsung
Ex. 1031 - Page 486

From:	Tomas Prieto
To:	PTAB Hearings
Cc:	Favor, Jamel
Subject:	Correction of Oral Hearing Transcript // Appeal 2024-003078, Application 17/867,612; Fish IP ref 103692.0001US4re
Date:	Wednesday, October 16, 2024 12:51:09 PM
Attachments:	image002.png image004.png image005.png 2024-09-13 Oral Hearing Transcript.PDF

CAUTION: This email has originated from a source outside of USPTO. **PLEASE CONSIDER THE SOURCE** before responding, clicking on links, or opening attachments.

Dear Sir/Madam,

I am emailing you after I called the PTAB line and spoke with Mr. Jamel Favor. Mr Favor indicated that emailing this address would be the best way to move things forward. Here's the situation:

We had an oral hearing on this appeal on September 4. The transcript for the oral hearing (attached for your convenience) issued September 13.

After reviewing the transcript, I found an error in the transcription that needs to be corrected to ensure that the record on this application remains clear. On page 27 of the transcript (page 28 of the PDF document), lines 2-3 reads "So, we think the claims are not definite." This section should read "So, we think the claims are not **indefinite**." (emphasis mine) As you can appreciate, the difference is subtle but significant.

I reached out to Jamison Professional Services and spoke with Tracie Ellis. Tracie indicated that after having two different QC people hearing it in various forms, they agreed with me. She indicated that she tried to reach their liaison at the USPTO, who told them that we had to request for the change via a form – that Jamison was not allowed to submit the addendum/correction on their end.

Can you please let me know what we have to submit so that we can get the transcript corrected? You can reach me via email at tprieto@fishiplaw.com or via direct phone line at 949-943-8329.

Thank you in advance,

Tomas

Tomás A. Prieto
Senior Associate Attorney* | Fish IP Law LLP
19900 MacArthur Blvd. Suite 810, Irvine, CA 92612
Direct: 949-943-8329 | Main: 949-943-8300 | Fax: 949-943-8358
tprieto@fishiplaw.com | LinkedIn | Bio | Skype: tomasatft
The Future is Patent Pending℠

*Admitted to practice in Illinois and before the USPTO only.

Fish IP Law LLP, exclusive providers of Green Fields Patenting® and Blue Sky Patenting® patent portfolio development services.

Privileged and Confidential Communication. This electronic transmission, and any documents attached hereto, (a) are protected by the Electronic Communications Privacy Act (18 USC §§ 2510-2521), (b) may contain confidential and/or legally privileged information, and (c) are for the sole use of the intended recipient named above. If you have received this electronic message in error, please notify the sender and delete the electronic message. Any disclosure, copying, distribution, or use of the contents of the information received in error is strictly prohibited.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 12/02/2024

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
12/02/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YAKKOV MERLIN

Appeal 2024-003078
Reissue Application 17/867,612
Patent 9,407,969 B2
Technology Center 3900

Before JOHN A. JEFFERY, JENNIFER L. McKEOWN, and MICHAEL J. ENGLE, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Under 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 1–8, 10–19, and 21. We have jurisdiction under 35 U.S.C. § 6(b), and we heard the appeal on September 4, 2024.[2]

We REVERSE.

---

[1] Appellant identifies the real party in interest as TVnGO Ltd. (BVI). Appeal Br. 2.

[2] Throughout this opinion, we refer to the transcript of this oral hearing filed September 13, 2024 ("Tr.").

STATEMENT OF THE CASE

Appellant seeks to reissue U.S. Patent 9,407,969 B2 ("the '969 patent") involving a "TV-Internet Integration Box" that can merge broadcast TV signals with Internet Protocol (IP) packet data at a customer site, thus enabling a TV set connected to the box to display (1) Internet program selection data while a TV broadcast program is viewed, and (2) an Internet movie instead of the TV broadcast program. '969 patent col. 2, ll. 28–35. To this end, first data is broadcast over a TV subscriber channel for simultaneous display with second data broadcasted over a digital data communications network. *Id.* col. 2, ll. 36–40. Claim 1 is illustrative and reproduced below with deletions since issuance in square brackets, additions since issuance underlined, and some indenting added for clarity:

> 1. A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising:
>
> (a) providing a combiner circuit at the user's premises, wherein:
>
> the combiner circuit is coupled to a TV set and connected to a separate TV [timer]<u>tuner</u> box or TV tuner in the TV set, at the user's premises, and
>
> the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the <u>separate</u> TV tuner box or <u>the</u> TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet,
>
> wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and
>
> wherein said overlay-enabling digital data includes at least:

Samsung
Ex. 1031 - Page 491

a Web link indicating a website where content that is associated with said overlay enabling digital data is stored,

an image indicative of the content associated with said overlay-enabling digital data, and

an overlay activation criterion; and

(b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said overlay activation criterion is met, wherein generating [an] the overlay includes:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

Appeal Br. 19–20 (Claims App.).

RELATED PROCEEDINGS

Appellant identifies litigation involving the '969 patent where the Federal Circuit affirmed the district court's determination that claims 1, 9, 10, 13, 17, and 20 were indefinite. *See* Appeal Br. 3; Reply Br. 1–2; *TVnGO Ltd. v. LG Elecs., Inc.*, 861 F. App'x 453 (Fed. Cir. 2021) (non-precedential); *TVnGO Ltd. v. LG Elecs., Inc.*, No. 18-10238, 2020 WL 1899781 (D.N.J. Apr. 17, 2020).

Appellant also informs us of a related reissue application, 17/714,917, filed in connection with U.S. Patent No. 8,132,220, the parent of the '969 patent's underlying application. *See* Appeal Br. 3; Reply Br. 1–2.

THE REJECTION[3]

The Examiner rejected claims 1–8, 10–19, and 21 under 35 U.S.C. § 112, second paragraph as indefinite. Final Act. 8–11.[4]

THE EXAMINER'S FINDINGS AND CONCLUSIONS AND APPELLANT'S CONTENTIONS

In rejecting independent claim 1, the Examiner relies on the Federal Circuit's decision holding claims 1, 9, 10, 13, 17, and 20 of the '969 patent are indefinite given the recitation of an "overlay activation criterion." *See* Final Act. 8–11; *TVnGO Ltd.*, 861 F. App'x at 460. The Examiner reaches this conclusion even though Appellant cancelled dependent claims 9 and 20—claims that the Federal Circuit relied on for an irreconcilable inconsistency in connection with the recited "overlay activation criterion." *See* Final Act. 10; *TVnGO Ltd.*, 861 F. App'x at 458–60. According to the Examiner, this cancellation does not eliminate one of the few sources of intrinsic evidence on the meaning of the term "overlay activation criterion" and, consequently, despite cancelling claims 9 and 20, a skilled artisan would still discover the inconsistency that casts doubt on the term's meaning. Final Act. 10–11.

---

[3] Because the Examiner withdrew the rejections under 35 U.S.C. § 251 on page 2 of the Advisory Action mailed November 7, 2023, those rejections are not before us.

[4] Throughout this opinion, we refer to (1) the Final Office Action mailed July 31, 2023 ("Final Act."); (2) the Appeal Brief filed January 3, 2024 ("Appeal Br."); (3) the Examiner's Answer mailed April 19, 2024 ("Ans."); and (4) the Reply Brief filed June 20, 2024 ("Reply Br.").

Appellant argues that cancelling claims 9 and 20 resolves the indefiniteness issue because it breaks the link of terminology that gave rise to the inconsistencies that led to the invalidity in the District Court and Federal Circuit decisions. Appeal Br. 6–13; Reply Br. 2–9. According to Appellant, because the courts' indefiniteness determinations were based on an inconsistency regarding the "overlay activation criterion's" source, namely the internet in independent claims 1 and 13 and the user's premises in dependent claims 9 and 20, cancelling claims 9 and 20 removes that inconsistency and, therefore, removes the indefiniteness issue. *See* Appeal Br. 6–9. Appellant emphasizes that this cancellation and its corresponding arguments are also a key part of the prosecution history that removes any possible interpretation that the "overlay activation criterion" comes from the user's premises. *See id.* at 9–13; Reply Br. 7–9. Appellant adds that cancelling claims 9 and 20 does not enlarge the scope of independent claims 1 and 13 because they are fundamentally unchanged. Appeal Br. 16–17; Reply Br. 10–15.

ISSUE

Has the Examiner erred in rejecting claims 1–8, 10–19, and 21 under § 112, second paragraph by finding that the recited "overlay activation criterion" renders the claims indefinite?

ANALYSIS

As noted above, this appeal turns on whether the recited "overlay activation criterion" renders independent claims 1 and 13 (and, by their

dependency, claims 2–8, 10–12, 14–19, and 21) indefinite despite Appellant's cancelling dependent claims 9 and 20, the limitations of which were held to be inconsistent with those in their respective independent claims.

To answer this question, we first turn to the Federal Circuit's decision in this regard. The Federal Circuit noted that there was no dispute that the term "overlay activation criterion" had no ordinary meaning in the art. *TVnGO*, 861 F. App'x at 457. The Federal Circuit in particular noted that "[i]n the claims, [the phrases 'overlay activation criterion' and 'overlap activation signal'] relate generally to producing overlays (e.g., in Figures 7a–c . . .). But their precise meanings are not reasonably certain in view of the intra-patent inconsistencies discussed by the district court." *Id.* (internal citation omitted). Although Appellant "contend[ed] that a skilled artisan would understand the disputed phrase by stitching together their constituent words" (e.g., "overlay," "activation," and "criterion"), the Federal Circuit was "unpersuaded that the ordinary meanings of the constituent words alone are enough in the context of this case to establish what these phrases mean." *Id.* at 457–58.

The Federal Circuit added that "[t]he patent record is also unhelpful" in construing the term "overlay activation criterion," for the term is not mentioned—let alone defined—in the Specification. *Id.* at 458. Rather, the term was "added to the claims during prosecution," and "the 'limited information' provided by the prosecution history isn't enough to provide reasonable certainty" regarding the term's meaning. *Id.* Thus, the Federal

Circuit determined that "[t]his dearth of evidence leaves the skilled artisan unable to resolve the inconsistencies discussed below." *Id.*

The Federal Circuit then turned to the patent's claims themselves in an attempt to construe the term "overlay activation criterion," but noted an inconsistency between the independent and dependent claims regarding whether the recited "overlay activation criterion" comes from the internet or a user's premises.[5] *Id.* at 459–60. Notably, the Federal Circuit emphasized that "merely dismissing the dependent claims as invalid . . . ignores that they are *one of the few sources of intrinsic evidence* on the meaning of 'overlay activation criterion' in this record." *Id.* at 460 (emphasis added). As the Federal Circuit indicated, "[w]hen faced with this *unknown* and *undefined* phrase, a skilled artisan would look for clarification not only in the specification but also in *other* claims of the patent in question, which can also be valuable sources of enlightenment as to the meaning of a claim term." *Id.* (emphases added) (quotations omitted). But in doing so, a skilled artisan "would discover an inconsistency, throwing the meaning of 'overlay activation criterion' into doubt"—an inconsistency that remains part of the

[5] In more detail, independent claim 1 recites "an Internet data input providing *overlay-enabling digital data* over the Internet" and "said overlay-enabling digital data includes at least . . . an *overlay activation criterion*." Claim 9 depended from claim 1 and further recited "said overlay activation criterion includes . . . a *user command information*." The Federal Circuit interpreted claim 9 as "indicating that an 'overlay activation criterion' can come from a user's premises via the remote control." *TVnGO*, 861 F. App'x at 459. Thus, "the intrinsic evidence presents irreconcilably inconsistent information . . . that 'overlay activation criterion' comes from the Internet and simultaneously *not* from the Internet—i.e., from the user's premises." *Id.* (quotation omitted).

intrinsic evidence regardless of whether the dependent claims are valid or not. *See id.*

Here, however, the record differs from that which was before the Federal Circuit because the record of this reissue application is also part of the prosecution history. Claims 9 and 20 have been cancelled.

Appellant's disavowal of the "overlay activation criterion" coming from the user's premises, as recited in dependent claims 9 and 20, is clear and unmistakable. Appellant states that it cancels claims 9 and 20 "to address concerns raised" by Federal Circuit's decision concluding that claims 1, 9, 10, 13, 17, and 20 of the '969 patent are indefinite. July 18, 2022 Preliminary Amendment 11. Appellant also states that it cancels claims 9 and 20 "to remove any possible interpretation of the 'overlay activation criterion' as coming from the user's premises (i.e., not from the internet)." Appeal Br. 12; *see also Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323–26 (Fed. Cir. 2003) (requiring clear and unmistakable actions or statements during prosecution for prosecution disclaimer to attach).

That the '969 patent, if reissued, would bracket Appellant's deleted claim language as the Examiner indicates (Ans. 8) only further clarifies the record in this respect, for the bracketing will place the public on clear notice that the claims containing the limitation that the Federal Circuit relied on ("said overlay activation criterion includes . . . a user command information") were cancelled.

To be sure, the Federal Circuit emphasized that "merely *dismissing* the dependent claims as *invalid*" was insufficient to resolve the

indefiniteness issue because that invalidity determination "ignores that [the dependent claims] are one of the few sources of intrinsic evidence on the meaning of 'overlay activation criterion'" that was then before the court. *See TVnGO*, 861 F. App'x at 460 (emphasis added). Thus, had the Federal Circuit merely held the dependent claims invalid, the meaning of "overlay activation criterion" still would have been problematic because the dependent claims were some of the few sources of evidence for the meaning of that term. Here, however, there is additional intrinsic evidence that a person of ordinary skill would look to in that the prosecution history (which includes that of this reissue proceeding) shows Appellant has now *canceled* the problematic dependent claims and, therefore, removed the problematic interpretation clearly and unmistakeably.[6]

On the record before us, including the explanations and clarifications articulated at the oral hearing considered in light of the current record as a whole, we conclude the term "overlay activation criterion" in independent claims 1 and 13 does not render the claims indefinite. We reach the same conclusion regarding their respective pending dependent claims that likewise

[6] With respect to the '969 patent's support for "overlay activation criteria," we note that at the oral hearing, Appellant conceded the Brief's first citation to column 5, line 29 to 44 was apparently erroneous, and instead relied on the functionality described in column 4 and Figure 3 of the '969 patent. *See* Tr. 12–13. Figure 3 shows a flowchart that checks a timetable, checks if the conditions match (e.g., "only during limited hours, for example when the children are asleep"), and if the conditions do match, then overlays the data (e.g., "an icon that indicates to the subscriber that an Internet movie is currently being broadcast; or . . . an advertisement or information related to the TV program being broadcast"). *See* '969 patent Fig. 3, col. 4, ll. 27–57.

Samsung
Ex. 1031 - Page 498

recite the term "overlay activation criterion" due to their dependency from the independent claims.

Therefore, on the totality of the record now before us, we are persuaded that the Examiner erred in rejecting claims 1–8, 10–19, and 21 as indefinite.

CONCLUSION

In summary:

Claim(s) Rejected	35 U.S.C. §	References/Basis	Affirmed	Reversed
1–8, 10–19, 21	112	Indefiniteness		1–8, 10–19, 21

REVERSED

Samsung
Ex. 1031 - Page 499

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

24392 7590 01/22/2025

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
3992	

DATE MAILED: 01/22/2025

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

TITLE OF INVENTION: FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$516	$0.00	$0.00	$516	04/22/2025

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 40% the amount of undiscounted fees, and micro entity fees are 20% the amount of undiscounted fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

Samsung
Ex. 1031 - Page 500

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via the USPTO patent electronic filing system.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

24392 7590 01/22/2025

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via the USPTO patent electronic filing system or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

TITLE OF INVENTION: FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$516	$0.00	$0.00	$516	04/22/2025

EXAMINER	ART UNIT	CLASS-SUBCLASS
BASEHOAR, ADAM L	3992	725-011000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. Fees submitted: ❑ Issue Fee ❑ Publication Fee (if required)

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

❑ Electronic Payment via the USPTO patent electronic filing system ❑ Enclosed check ❑ Non-electronic payment by credit card (Attach form PTO-2038)

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. **Change in Entity Status** (from status indicated above)

❑ Applicant certifying micro entity status. See 37 CFR 1.29

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

❑ Applicant asserting small entity status. See 37 CFR 1.27

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

❑ Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

PTOL-85 Part B (11/23) Approved for use through 03/31/2026 OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Samsung
Ex. 1031 - Page 501

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 01/22/2025

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER	
BASEHOAR, ADAM L	
ART UNIT	PAPER NUMBER
3992	

DATE MAILED: 01/22/2025

Determination of Patent Term Extension or Adjustment under 35 U.S.C. 154 (b)

A reissue patent is for "the unexpired part of the term of the original patent." See 35 U.S.C. 251. Accordingly, the above-identified reissue application is not eligible for Patent Term Extension or Adjustment under 35 U.S.C. 154(b).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 11/23)

Samsung
Ex. 1031 - Page 502

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. The United States Patent and Trademark Office (USPTO) collects the information in this record under authority of 35 U.S.C. 2. The USPTO's system of records is used to manage all applicant and owner information including name, citizenship, residence, post office address, and other information with respect to inventors and their legal representatives pertaining to the applicant's/ owner's activities in connection with the invention for which a patent is sought or has been granted. The applicable Privacy Act System of Records Notice for the information collected in this form is COMMERCE/PAT-TM-7 Patent Application Files, available in the Federal Register at 78 FR 19243 (March 29, 2013).
https://www.govinfo.gov/content/pkg/FR-2013-03-29/pdf/2013-07341.pdf

Routine uses of the information in this record may include disclosure to:

1) law enforcement, in the event that the system of records indicates a violation or potential violation of law;
2) a federal, state, local, or international agency, in response to its request;
3) a contractor of the USPTO having need for the information in order to perform a contract;
4) the Department of Justice for determination of whether the Freedom of Information Act (FOIA) requires disclosure of the record;
5) a Member of Congress submitting a request involving an individual to whom the record pertains, when the individual has requested the Member's assistance with respect to the subject matter of the record;
6) a court, magistrate, or administrative tribunal, in the course of presenting evidence, including disclosures to opposing counsel in the course of settlement negotiations;
7) the Administrator, General Services Administration (GSA), or their designee, during an inspection of records conducted by GSA under authority of 44 U.S.C. 2904 and 2906, in accordance with the GSA regulations and any other relevant (i.e., GSA or Commerce) directive, where such disclosure shall not be used to make determinations about individuals;
8) another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c));
9) the Office of Personnel Management (OPM) for personnel research purposes; and
10) the Office of Management and Budget (OMB) for legislative coordination and clearance.

If you do not furnish the information requested on this form, the USPTO may not be able to process and/or examine your submission, which may result in termination of proceedings, abandonment of the application, and/or expiration of the patent.

Notice of Allowability	Application No. 17/867,612	Applicant(s) MERLIN, Yakkov	
	Examiner Adam L Basehoar	Art Unit 3992	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☑ This communication is responsive to the PTAB Decision mailed on 12/02/2024.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☑ The allowed claim(s) is/are 1-8,10-19 and 21 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information , please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some* c) ☐ None of the:

   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. _____.
5. ☐ Examiner's Amendment/Comment
6. ☑ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/ADAM L BASEHOAR/
Primary Examiner, Art Unit 3992

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

2. For reissue applications filed on or after September 16, 2012, all references to 35 U.S.C. 251 and 37 CFR 1.172, 1.175, and 3.73 are to the current provisions.

DETAILED ACTION

3. This is a Notice of Allowability responsive to communications: The Decision by the Patent Trial and Appeal Board (PTAB) mailed on 12/02/2024. The PTAB Decision at least concluding:

> Therefore, on the totality of the record now before us, we are persuaded that the Examiner erred in rejecting claims 1–8, 10–19, and 21 as indefinite.
>
> CONCLUSION
>
> In summary:

Claim(s) Rejected	35 U.S.C. §	References/Basis	Affirmed	Reversed
1–8, 10–19, 21	112	Indefiniteness		1–8, 10–19, 21

> REVERSED

(PTAB Decision – p. 10)

4. Importantly, the PTAB Decision determined that the term "overlay activation criterion" in independent claims 1 and 13 does not render the claims indefinite. In doing so, the PTAB Decision distinguishes itself from the holdings by the CAFC (see: *TVnGO Ltd. v. LG Elecs. U.S.*, No. 2020-1837 (Fed. Cir. Jun. 28, 2021)) based on the fact that "the record differs from that

which was before the Federal Circuit because the record of this reissue application is also part of the prosecution history…Appellant's disavowal of the 'overlay activation criterion' coming from the user's premises, as recited in dependent claims 9 and 20, is clear and unmistakable." Thus, the prosecution history of this reissue application constitutes additional intrinsic evidence that "removed the problematic interpretation clearly and unmistakably."

The Examiner notes that on page 9 of the PTAB Decision, footnote 6 implies that support for "overlay activation criteria" is provided by Fig. 3 and column 4, lines 27-57 of the Merlin '969 patent. It is noted that the data stored (e.g., "a timetable indicating what type of IP data is to be displayed and when") in the memory of the TV-Internet Integration Box is stored locally by a subscriber (i.e., a user), and is thus not "overlay activation criteria" that comes from the Internet. At best, clearer support for the overlay activation criterion is provided in column 7, line 62 – column 8, line 15 of the Merlin '969 patent. Specifically, the second data (i.e., the claimed overlay-enabling digital data) at least includes data "on which channel or channels the associated IP content is to be streamed and at what times." That is to say, Table I of the Merlin '969 patent appears to provide clearer support for all three elements (i.e., "Web link", "image", and "overlay activation criterion") of the claimed "overlay-enabling digital data" that comes from the Internet.

8

TABLE I

Second data - definition			
Icon image	Channel	Time	Website of IP content
ICON.GIF	2; 23	19:30; 21:30	www.AB.com/adverts/123.htm

5. The Examiner further notes that a "complete reversal of the examiner's rejection brings the case up for immediate action by the examiner...Though the examiner is expected to bring the prior art search up-to-date prior to passing an application to issue, the examiner should never regard such a reversal as a challenge to make a new search to uncover other and better references" (see: MPEP 1214.04).

6. Finally, the Examiner notes that the PTAB Decision did not specifically address (e.g., see: footnote 3 on page 4 of the PTAB Decision), as requested by Applicant and Examiner, the potential issue of improper claim broadening in view of a previously cited informative PTAB decision (see: *Ex parte Adams*, Appeal 2007-0441 (March 14, 2007)). Further, the PTAB did not exercise its discretionary authority under 37 CFR 41.50(b) to make any new grounds of rejection.

In light of the determination by the PTAB that the term "overlay activation criterion" in independent claims 1 and 13 clearly does not render the claims indefinite, the Examiner does not believe a rejection under 35 U.S.C. 251 for improper claim broadening is presently warranted. The fact pattern in *Ex parte Adams*, Appeal 2007-0441 (March 14, 2007) now appears to be sufficiently different (i.e., the fatal contradiction resided within the same independent claim) from the situation in the instant reissue application.

7. Therefore, claims 1-8, 10-19, and 21 are allowed.

REASONS FOR ALLOWANCE

8. The following is an Examiner's statement of reasons for allowance:

Regarding independent claims 1 and 13, the Examiner notes that each claim recites substantially identical subject matter found allowable by the previous examiner during prosecution of the 13/336,189 application. The current Examiner has performed an updated search of the claimed subject matter, but has not discovered any prior art better than the art previously made of record. Therefore, the current Examiner agrees with the previous examiner's indication of allowability, and thus independent claims 1 and 13 are allowable at least for the same reasons as determined during the original prosecution history of the 13/336,189 application. For example, see the following examiner's statement of reasons for allowance from the parent 11/794,825 application (now U.S. Patent No. 8,132,220):

Allowable Subject Matter

Claims 19-39 are allowed.

The following is an examiner's statement of reasons for allowance:

With regard to independent claims 19 and 29, the prior art fails to disclose or reasonably suggest the invention taken as a whole with respect to a combiner unit at the user's premises separate from a TV tuner box or TV tuner in the TV set that receives video and overlay enabling digital data from mutually distinct, unrelated sources and inputs, wherein the unrelated sources are a video source and the Internet, wherein the overlay enabling digital data comprise a web link indicating a website where content that is associated with the overlay-enabling digital data is stored, an image indicative of the content associated with the overlaying digital data, and overlay activation criterion.

The closest prior art (Akiyama (WO 02/19689) and Butler (US 20020007493)) discloses receiving both video and overlay activation criteria from the same source (Butler, paragraph [0053], [0058]) and receiving the supplemental content from a different source such as the Internet (Akiyama, page 16-18), however fails to disclose that the source of the video content and the overlay activation criteria are unrelated and received via mutually distinct and independent inputs.

Dependent claims 2-8, 10-12, 14-19, and 21 are allowable at least because they depend from an allowable base claim.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam L Basehoar whose telephone number is (571)272-4121. The examiner can normally be reached 8:00AM - 4:30PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kosowski can be reached on 571-272-3744. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: https://patentcenter.uspto.gov. Visit https://www.uspto.gov/patents/apply/patent-center for more information about Patent Center and https://www.uspto.gov/patents/docx for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADAM L BASEHOAR/
Primary Examiner, Art Unit 3992

Conferees:

/DENNIS G BONSHOCK/
Primary Examiner, Art Unit 3992

/ALEXANDER J KOSOWSKI/
Supervisory Patent Examiner, Art Unit 3992

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☑ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	10/17/2022	07/13/2023	01/12/2025						
1	1	✓	✓	=						
2	2	✓	✓	=						
3	3	✓	✓	=						
4	4	✓	✓	=						
5	5	✓	✓	=						
6	6	✓	✓	=						
7	7	✓	✓	=						
8	8	✓	✓	=						
9	9	✓	O	-						
10	10	✓	✓	=						
11	11	✓	✓	=						
12	12	✓	✓	=						
13	13	✓	✓	=						
14	14	✓	✓	=						
15	15	✓	✓	=						
16	16	✓	✓	=						
17	17	✓	✓	=						
18	18	✓	✓	=						
19	19	✓	✓	=						
20	20	✓	O	-						
21	21	✓	✓	=						

Samsung
Ex. 1031 - Page 511

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

CPC - Searched*		
Symbol	Date	Examiner
H04N 21/(44016, 4782, 4316, 4622, 431)	10/17/2022	ALB

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
725	109	10/17/2022	ALB
715	717, 718	10/17/2022	ALB
345	629	10/17/2022	ALB

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

Search Notes		
Search Notes	**Date**	**Examiner**
Reviewed Prior Application(s) History/Cited Prior Art	10/17/2022	ALB
Inventor Name Search (PE2E)	10/17/2022	ALB
Recapture Review Conducted	10/17/2022	ALB
Litigation Search (07/26/2022)	10/17/2022	ALB
PE2E Text and Classification Search (see attached search history)	10/17/2022	ALB
Reviewed Applicant's Response (05/30/2023)	07/13/2023	ALB
Searched Patent Data Portal (Patent No. 9,407,969) - No Prior/ Pending Reexams/Reissues Found	07/13/2023	ALB
Searched P-TACTS (Patent No. 9,407,969) - No Prior/Pending AIA Proceedings Found	07/13/2023	ALB
Reviewed: TVnGO Ltd. v. LG Elecs. U.S., No. 2020-1837 (Fed. Cir. Jun. 28, 2021) and Civil No. 18-10238 (RMB/KMW)	07/13/2023	ALB
Consulted Steve Stein (Managing Quality Assurance Specialist)	07/13/2023	ALB
Reviewed Applicant's After Final Response (09/28/2023)	10/06/2023	ALB
Consulted Drew Fischer (Supervisory Patent Examiner)	10/25/2023	ALB
Reviewed PTAB Decision (12/02/2024) - Reversed	01/12/2025	ALB
Reviewed Oral Hearing Transcript (09/13/2024)	01/12/2025	ALB
Interference Search	01/12/2025	ALB

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
H04N 21/(44016, 4782, 4316, 4622, 431)		01/12/2025	ALB
725	109	01/12/2025	ALB
715	717, 718	01/12/2025	ALB
345	629	01/12/2025	ALB

Samsung
Ex. 1031 - Page 513

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	Art Unit
	Adam L Basehoar	3992

Samsung
Ex. 1031 - Page 514

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	**Art Unit**
	Adam L Basehoar	3992

CPC						
Symbol					**Type**	**Version**
H04N	/	21	/	44016	F	2013-01-01
H04N	/	21	/	4316	I	2013-01-01
H04N	/	21	/	4331	I	2013-01-01
H04N	/	21	/	4381	I	2013-01-01
H04N	/	21	/	4438	I	2013-01-01
H04N	/	21	/	4622	I	2013-01-01
H04N	/	21	/	4782	I	2013-01-01
H04N	/	21	/	6118	I	2013-01-01
H04N	/	21	/	6125	I	2013-01-01
H04N	/	21	/	6143	I	2013-01-01
H04N	/	21	/	64322	I	2013-01-01
H04N	/	21	/	812	I	2013-01-01
H04N	/	21	/	854	I	2013-01-01
H04N	/	21	/	431	A	2013-01-01

CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
	/		/					

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 19	
/ADAM L BASEHOAR/ Primary Examiner, Art Unit 3992 (Primary Examiner)	12 January 2025 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20250107

Samsung
Ex. 1031 - Page 515

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	**Art Unit**
	Adam L Basehoar	3992

INTERNATIONAL CLASSIFICATION				
CLAIMED				
H04N	/	21	/	443
H04N	/	21	/	431
H04N	/	21	/	643
H04N	/	21	/	4782
H04N	/	21	/	462
H04N	/	21	/	438

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					

NONE (Assistant Examiner) (Date)	**Total Claims Allowed:** 19	
/ADAM L BASEHOAR/ Primary Examiner, Art Unit 3992 (Primary Examiner) 12 January 2025 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,612	MERLIN, Yakkov
	Examiner	**Art Unit**
	Adam L Basehoar	3992

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☑ T.D. ☐ R.1.47

CLAIMS

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	10	10	19	19										
2	2	11	11	20	20										
3	3	12	12	21	21										
4	4	13	13												
5	5	14	14												
6	6	15	15												
7	7	16	16												
8	8	17	17												
9	9	18	18												

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 19	
/ADAM L BASEHOAR/ Primary Examiner, Art Unit 3992 (Primary Examiner)	12 January 2025 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

U.S. Patent and Trademark Office Part of Paper No.: 20250107

Samsung
Ex. 1031 - Page 517

United States Patent And Trademark Office	**Application No.** 17/867,612	**Art Unit** 3992
Reissue Terminal Disclaimer Review Form	**Examiner** ADAM L BASEHOAR	**AIA Status** No

Original Patent Number of Patent to be Reissued is: 9,407,969	**The Maintenance fee status is:** ◉ up to date ○ not up to date (Consult with SPRS)

Is there a terminal disclaimer filed and accepted during the prosecution of (i) the current reissue application, (ii) the underlying patent, and/or (iii) reexamination proceeding(s) of the underlying patent?

○ NO
◉ YES (Complete the rest of the form)

The reissue patent is subject to Terminal Disclaimer(s) that was/were:

☐ filed and accepted (DISQ or DISQ.E.FILE) during the prosecution of the current reissue application. (Enter terminal disclaimer(s) filing date(s) below).

1. _____ 2. _____ 3. _____

The underlying patent of the current reissue application is subject to Terminal DIsclaimer(s) that was/were:

☑ accepted (DISQ or DISQ.E.FILE) and of record in the prosecution of the underlying patent and/or reexamination procceeding(s) of the underlying patent. (Enter application/control no(s) and terminal disclaimer(s) filing date(s) below).

1. 13/336,189 23 April 2015 2. _____ _____ 3. _____ _____

PE2E SEARCH - Search History (Prior Art)

There are no Prior Art searches to show.

PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N1	1	"9407969".pn.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:10 PM
N7	37077	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.)	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:12 PM
N9	3	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (overlay ADJ activation ADJ criterion).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:13 PM
N10	239	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (overlay near3 data).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:14 PM
N11	1	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (overlay near3 data SAME combiner ADJ circuit).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:14 PM
N12	2	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (overlay near3 data SAME web ADJ link).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:14 PM
N13	91	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (overlay near3 data SAME (image OR icon)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:14 PM
N14	86	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (overlay SAME video ADJ signal$1).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:15 PM

N15	14	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (overlay SAME video ADJ signal$1 SAME (TV OR television)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:15 PM
N16	9	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (overlay SAME criterion).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:15 PM
N17	40	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (video ADJ signal SAME digital ADJ data).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:16 PM
N18	4	(H04N21/44016,4782,4316,4622,431.cpc. OR 725/109;715/717,718;345/629.ccls.) AND (video ADJ signal SAME digital ADJ data SAME (distinct OR different)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:16 PM
N19	3	(overlay ADJ activation ADJ criterion).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:17 PM
N20	0	(overlay ADJ activation ADJ criteria).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:18 PM
N21	4411	(overlay near3 data).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:18 PM
N22	2	(overlay near3 data SAME combiner ADJ circuit).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:18 PM
N23	2	(overlay near3 data SAME web ADJ link).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:19 PM
N24	1540	(overlay near3 data SAME (image OR icon)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:19 PM
N25	380	(overlay SAME video ADJ signal$1).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:19 PM
N26	38	(overlay SAME video ADJ signal$1 SAME (TV OR television)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:19 PM
N27	123	(overlay SAME criterion).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:20 PM
N28	802	(video ADJ signal SAME digital ADJ data).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:20 PM

N29	74	(video ADJ signal SAME digital ADJ data SAME (distinct OR different)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:21 PM
N30	80	(internet SAME video ADJ signal$1 SAME combin$5).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:21 PM
N31	19	(internet SAME video ADJ signal$1 SAME combin$5 SAME (tv OR television)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:21 PM
N32	3	(internet SAME video ADJ signal$1 SAME combin$5 SAME (tv OR television) SAME overla$5).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2025/01/12 12:21 PM

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

BIB DATA SHEET

CONFIRMATION NO. 8539

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
17/867,612	07/18/2022 RULE	725	3992	103692.0001US4re

APPLICANTS /ALB/
TVNGO LTD. (BVI), Amsterdam, NETHERLANDS;

INVENTORS /ALB/
Yakkov MERLIN, Raanana, ISRAEL;

**** CONTINUING DATA **************************** /ALB/
This application is a REI of 13/336,189 12/23/2011 PAT 9407969
which is a CON of 11/794,825 07/06/2007 PAT 8132220
which is a 371 of PCT/IL2005/000035 01/11/2005

**** FOREIGN APPLICATIONS **************************** /ALB/

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
07/21/2022

Foreign Priority claimed	35 USC 119(a-d) conditions met	Verified and Acknowledged	Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☐ Yes ☑ No	☐ Yes ☑ No	/ADAM L BASEHOAR/ Examiner's Signature	☐ Initials	ISRAEL	7	~~24~~ 19	2

ADDRESS /ALB/

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612
UNITED STATES

TITLE /ALB/
FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

FILING FEE RECEIVED	FEES: Authority has been given in Paper	
0.00	No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via the USPTO patent electronic filing system.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

24392 7590 01/22/2025
FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via the USPTO patent electronic filing system or by facsimile to (571) 273-2885, on the date below.

Tomas A. Prieto	(Typed or printed name)
/Tomas A. Prieto/	(Signature)
January 23, 2025	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

TITLE OF INVENTION: FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$516	$0.00	$0.00	$516	04/22/2025

EXAMINER	ART UNIT	CLASS-SUBCLASS
BASEHOAR, ADAM L	3992	725-011000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Fish IP Law, LLP
2 Tomas A. Prieto
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE TVnGO LTD (BVI) (B) RESIDENCE: (CITY and STATE OR COUNTRY) Amsterdam, NL

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required)

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

☒ Electronic Payment via the USPTO patent electronic filing system ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. **Change in Entity Status** (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

☐ Applicant asserting small entity status. See 37 CFR 1.27

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

☐ Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Tomas A. Prieto/ Date January 23, 2025

Typed or printed name Tomas A. Prieto Registration No. 60,675

PTOL-85 Part B (11/23) Approved for use through 03/31/2026 OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Samsung
Ex. 1031 - Page 523

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	**01/23/2025 08:05:54 PM Z ET**	**103692.0001US4re**

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Tomas Prieto
PATENT CENTER #	68889091	FILING DATE	07/18/2022
CUSTOMER #	24392	FIRST NAMED INVENTOR	Yakkov MERLIN
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	-

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Fee Transmittal Form.pdf	1	Issue Fee Payment (PTO-85B)	110 KB

Warning: The attached file contains comments or annotations. Comments are not recommended and may cause processing problems with the document.

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
Fee Transmittal Form.pdf	9F8317383A3C7F2EAE38D27DE73997E50473DD73B806A35E9E360CC39FEFD41673D38930601DBB73CBC5C1C0B1FA9865DEB6EC1551AB3DE321DFF66FAF89B194

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized

by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC PAYMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,612	**01/23/2025 08:05:54 PM Z ET**	**103692.0001US4re**

Title of Invention

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Application Information

APPLICATION TYPE	Utility - Reissue	PATENT #	-
CONFIRMATION #	8539	FILED BY	Tomas Prieto
PATENT CENTER #	68889091	AUTHORIZED BY	-
CUSTOMER #	24392	FILING DATE	07/18/2022
CORRESPONDENCE ADDRESS	-	FIRST NAMED INVENTOR	Yakkov MERLIN

Payment Information

PAYMENT METHOD	PAYMENT TRANSACTION ID	PAYMENT AUTHORIZED BY
CARD / 1002	**E20251MK06557005**	**Tomas Prieto**

PRE-AUTHORIZED ACCOUNT	PRE-AUTHORIZED CATEGORY
500341	**37 CFR 1.16 (National application filing, search, and examination fees); 37 CFR 1.17 (Patent application and reexamination processing fees); 37 CFR 1.19 (Document supply fees); 37 CFR 1.20 (Post Issuance fees); 37 CFR 1.21 (Miscellaneous fees and charges)**

FEE CODE	DESCRIPTION	ITEM PRICE($)	QUANTITY	ITEM TOTAL($)
2511	REISSUE ISSUE FEE	516.00	1	516.00
			TOTAL AMOUNT:	**$516.00**

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	03/04/2025	RE50328	103692.0001US4re	8539

24392 7590 02/12/2025

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

ISSUE NOTIFICATION

The projected patent number and issue date are specified above. The patent will issue electronically. The electronically issued patent is the official patent grant pursuant to 35 U.S.C. § 153. The patent may be accessed on or after the issue date through Patent Center at https://patentcenter.uspto.gov/. The patent will be available in both the public and the private sides of Patent Center. Further assistance in electronically accessing the patent, or about Patent Center, is available by calling the Patent Electronic Business Center at 1-888-217-9197.

The USPTO is implementing electronic patent issuance with a transition period, during which period the USPTO will mail a ceremonial paper copy of the electronic patent grant to the correspondence address of record. Additional copies of the patent (i.e., certified and presentation copies) may be ordered for a fee from the USPTO's Certified Copy Center at https://certifiedcopycenter.uspto.gov/index.html. The Certified Copy Center may be reached at (800)972-6382.

Determination of Patent Term Extension or Adjustment under 35 U.S.C. 154 (b)

A reissue patent is for "the unexpired part of the term of the original patent." See 35 U.S.C. 251. Accordingly, the above-identified reissue application is not eligible for Patent Term Extension or Adjustment under 35 U.S.C. 154(b).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Patents Stakeholder Experience (OPSE), Stakeholder Support Division (SSD) at (571)-272-4200.

INVENTOR(s) (Please see PATENT CENTER site https://patentcenter.uspto.gov for additional inventors):

Yakkov MERLIN, Raanana, ISRAEL;

APPLICANT(s) (Please see PATENT CENTER site https://patentcenter.uspto.gov for additional applicants):

TVNGO LTD. (BVI), Amsterdam, NETHERLANDS, Assignee (with 37 CFR 1.172 Interest);

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

United States of America

To Promote the Progress of Science and Useful Arts

The Director

of the United States Patent and Trademark Office has received an application for the reissue of a patent. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a reissue patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the unexpired part of the term of the original grant, subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Acting Director of the United States Patent and Trademark Office

Maintenance Fee Notice

If the application for the original patent being reissued is a utility application filed on or after December 12, 1980, maintenance fees are due three years and six months, seven years and six months, and eleven years and six months after the date of the grant of the original patent, or within a grace period of six months thereafter upon payment of a surcharge as provided by law. The amount, number and timing of the maintenance fees required may be changed by law or regulation. Unless payment of the applicable maintenance fee is received in the United States Patent and Trademark Office on or before the date the fee is due or within a grace period of six months thereafter, the patent will expire as of the end of such grace period.

No maintenance fees are required in plant or design patents.

Form PTO-378C (Rev 09/17)

US00RE50328E

(19) **United States**
(12) **Reissued Patent**
Merlin

(10) **Patent Number: US RE50,328 E**
(45) **Date of Reissued Patent: Mar. 4, 2025**

(54) **FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL**

(71) Applicant: **TVNGO LTD. (BVI)**, Amsterdam (NL)

(72) Inventor: **Yakkov Merlin**, Raanana (IL)

(73) Assignee: **TVnGO LTD (BVI)**, Amsterdam (NL)

(21) Appl. No.: **17/867,612**

(22) Filed: **Jul. 18, 2022**

Related U.S. Patent Documents

Reissue of:
(64) Patent No.: **9,407,969**
Issued: **Aug. 2, 2016**
Appl. No.: **13/336,189**
Filed: **Dec. 23, 2011**

U.S. Applications:
(63) Continuation of application No. 11/794,825, filed as application No. PCT/IL2005/000035 on Jan. 11, 2005, now Pat. No. 8,132,220.

(51) **Int. Cl.**

H04N 21/443	(2011.01)
H04N 21/431	(2011.01)
H04N 21/433	(2011.01)
H04N 21/438	(2011.01)
H04N 21/44	(2011.01)
H04N 21/462	(2011.01)
H04N 21/4782	(2011.01)
H04N 21/61	(2011.01)
H04N 21/643	(2011.01)

(Continued)

(52) **U.S. Cl.**
CPC ... ***H04N 21/44016*** (2013.01); ***H04N 21/4316*** (2013.01); ***H04N 21/4331*** (2013.01); ***H04N 21/4381*** (2013.01); ***H04N 21/4438*** (2013.01); ***H04N 21/4622*** (2013.01); ***H04N 21/4782*** (2013.01); ***H04N 21/6118*** (2013.01); ***H04N 21/6125*** (2013.01); ***H04N 21/6143*** (2013.01); ***H04N 21/64322*** (2013.01); ***H04N 21/812*** (2013.01); ***H04N 21/854*** (2013.01); *H04N 21/431* (2013.01)

(58) **Field of Classification Search**
CPC H04N 21/44016; H04N 21/4782; H04N 21/4316; H04N 21/4622; H04N 21/431
USPC 725/109; 715/717, 718; 345/629
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,990,927 A * 11/1999 Hendricks H04N 21/2389 725/132
6,136,898 A 10/2000 Loza et al.
(Continued)

FOREIGN PATENT DOCUMENTS

WO WO 00/08855 2/2000
WO WO 02/19689 A 3/2002

OTHER PUBLICATIONS

Office Action dated Sep. 28, 2022 in U.S. Appl. No. 17/714,917, 16 pages.

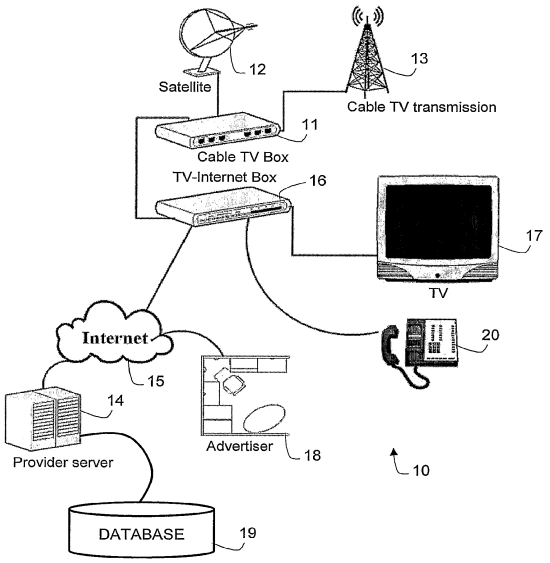
(Continued)

Primary Examiner — Adam L Basehoar
(74) *Attorney, Agent, or Firm* — Fish IP Law, LLP; Tomas A. Prieto

(57) **ABSTRACT**

A method of displaying an Internet signal on a TV. Preferably, at least a portion of the Internet signal is selectively displayed by a remote activation control signal.

19 Claims, 7 Drawing Sheets



(51) **Int. Cl.**
H04N 21/81 (2011.01)
H04N 21/854 (2011.01)

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,240,555	B1	5/2001	Shoff et al.	
6,351,270	B1	2/2002	Nishikawa et al.	
6,510,557	B1 *	1/2003	Thrift	H04N 21/4316 725/111
6,606,746	B1	8/2003	Zdepski et al.	
7,124,430	B2 *	10/2006	Aratani et al.	725/142
7,340,457	B1 *	3/2008	Killian et al.	
7,456,902	B2	11/2008	Kikinis	
2002/0007493	A1 *	1/2002	Butler et al.	725/109
2002/0144273	A1 *	10/2002	Reto	H04L 65/1101 348/E7.071
2003/0030652	A1 *	2/2003	Billmaier	H04N 21/4438 725/135
2004/0107437	A1 *	6/2004	Reichardt et al.	725/37
2005/0235319	A1 *	10/2005	Carpenter	H04N 21/4622 348/E5.103
2010/0085483	A1 *	4/2010	Pan	H04N 21/4622 348/E5.103
2013/0002716	A1 *	1/2013	Walker	H04N 21/47205 345/629

OTHER PUBLICATIONS

Plaintiff's Brief in Response to the Court's Mar. 6, 2020 Order in Civil Action No. 1:18-cv-10238-RMB-KMW, US District Court for the District of New Jersey, 15 pages.

* cited by examiner

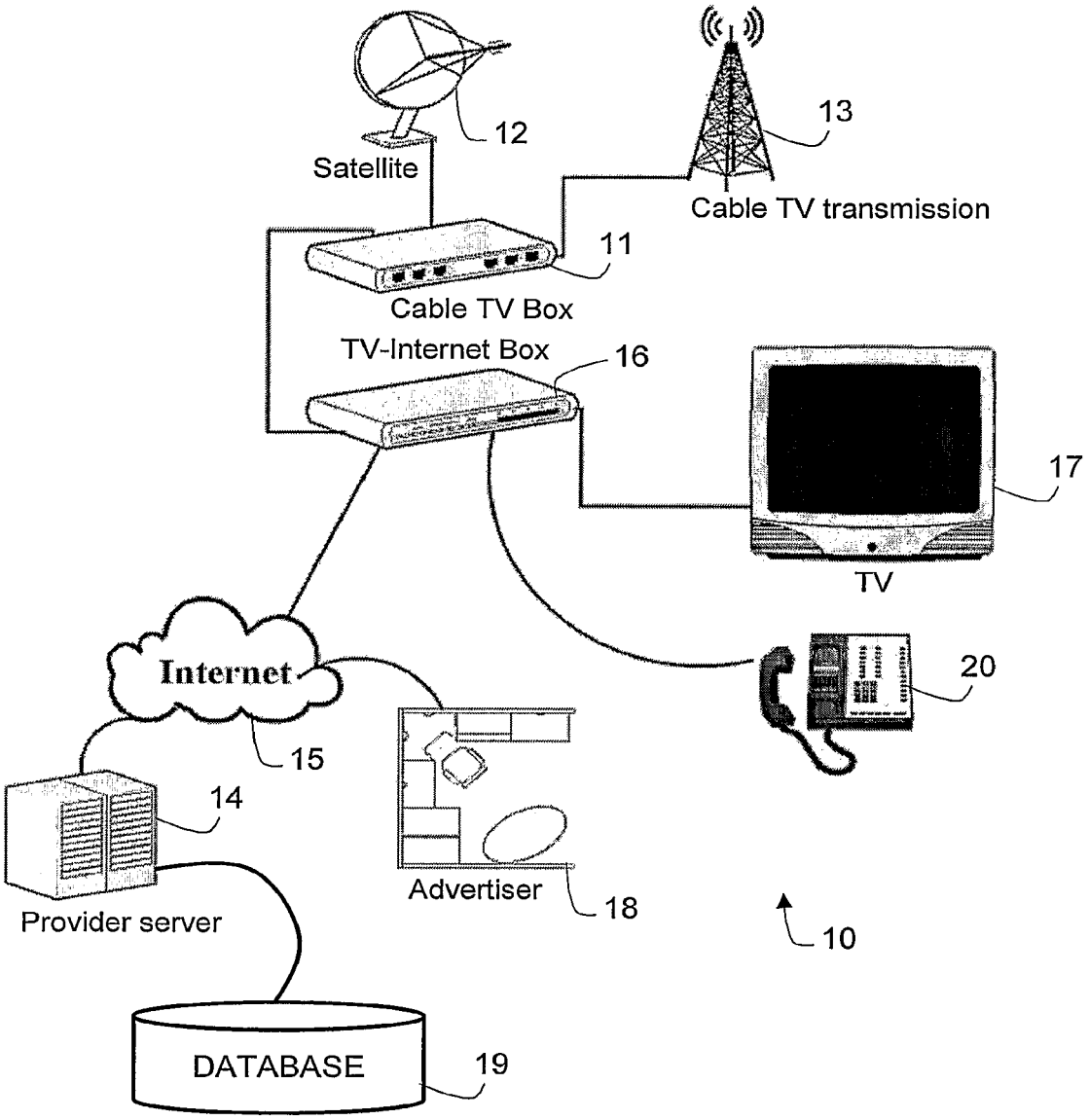

12
Satellite
13
Cable TV transmission
11
Cable TV Box
TV-Internet Box
16
17
TV
Internet
15
20
14
Provider server
Advertiser
18
10
DATABASE
19

FIG. 1

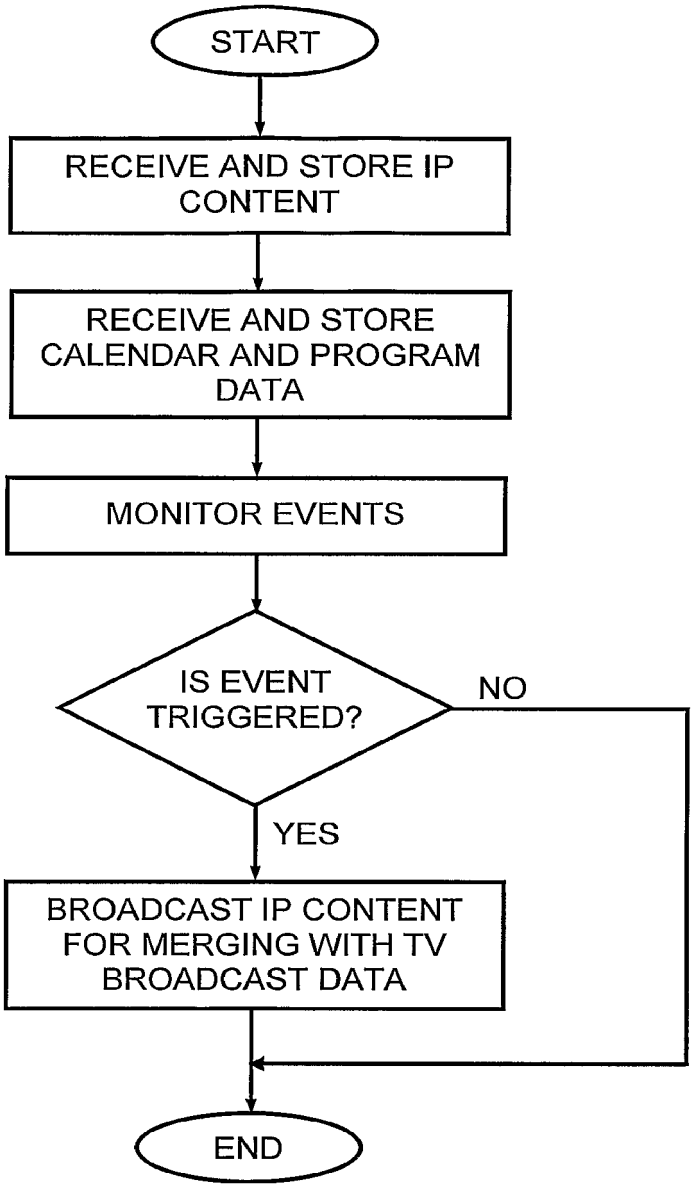

START
RECEIVE AND STORE IP CONTENT
RECEIVE AND STORE CALENDAR AND PROGRAM DATA
MONITOR EVENTS
IS EVENT TRIGGERED?
NO
YES
BROADCAST IP CONTENT FOR MERGING WITH TV BROADCAST DATA
END

FIG. 2

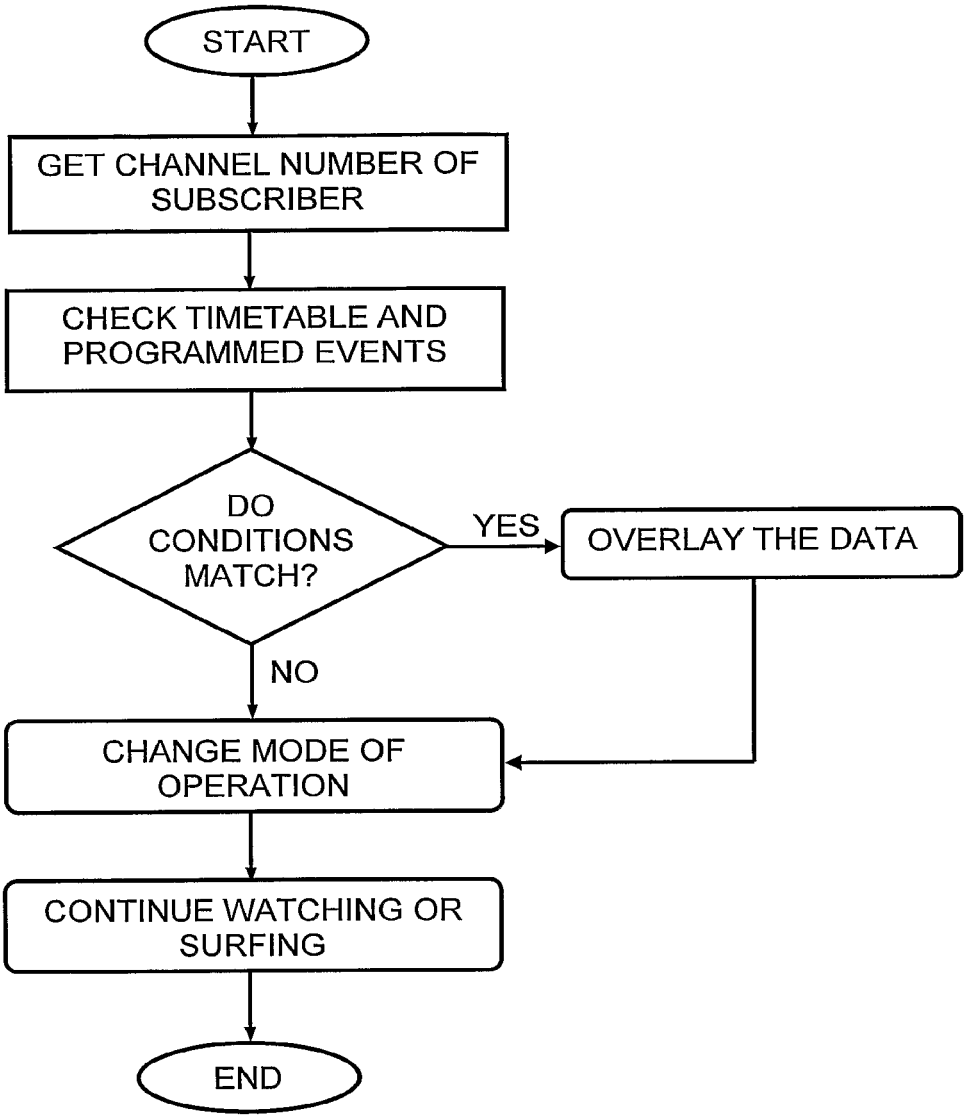

START
GET CHANNEL NUMBER OF SUBSCRIBER
CHECK TIMETABLE AND PROGRAMMED EVENTS
DO CONDITIONS MATCH?
YES
OVERLAY THE DATA
NO
CHANGE MODE OF OPERATION
CONTINUE WATCHING OR SURFING
END

FIG. 3

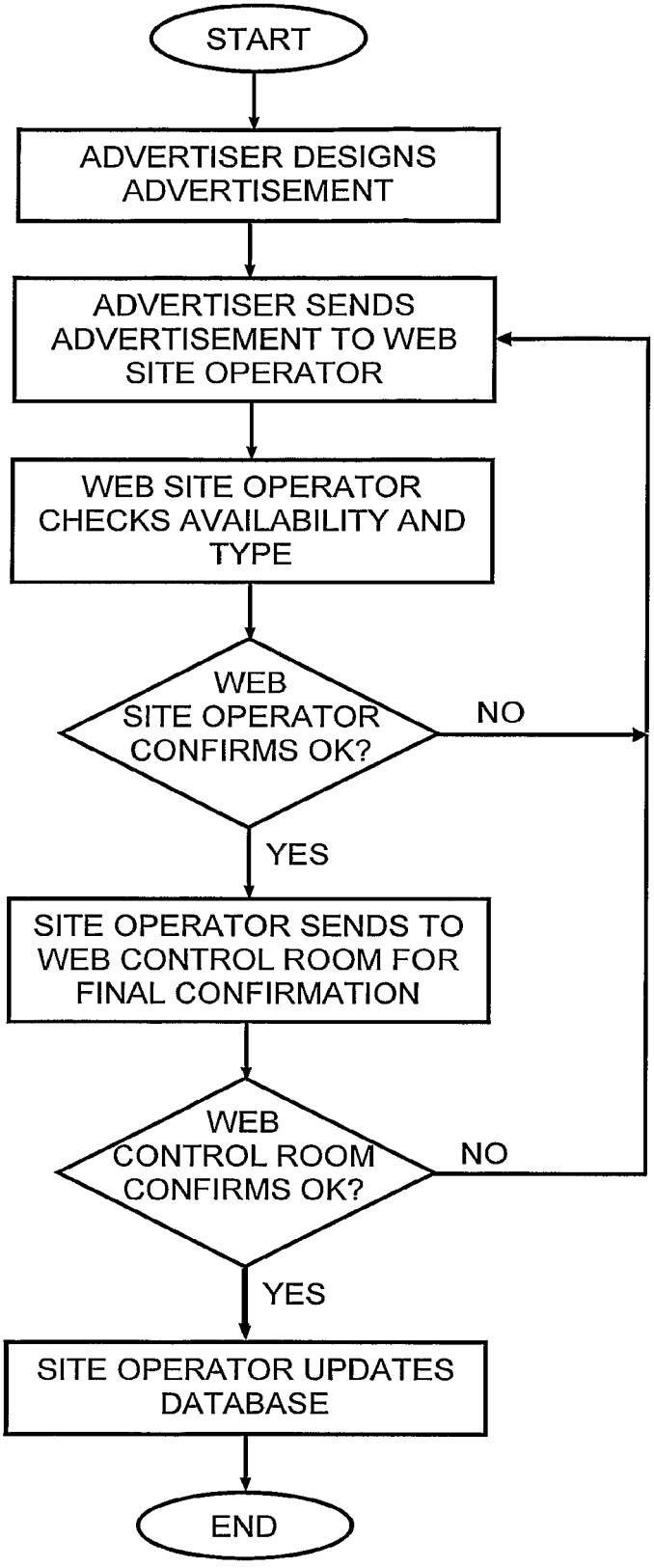

START
ADVERTISER DESIGNS ADVERTISEMENT
ADVERTISER SENDS ADVERTISEMENT TO WEB SITE OPERATOR
WEB SITE OPERATOR CHECKS AVAILABILITY AND TYPE
WEB SITE OPERATOR CONFIRMS OK?
NO
YES
SITE OPERATOR SENDS TO WEB CONTROL ROOM FOR FINAL CONFIRMATION
WEB CONTROL ROOM CONFIRMS OK?
NO
YES
SITE OPERATOR UPDATES DATABASE
END

FIG. 4

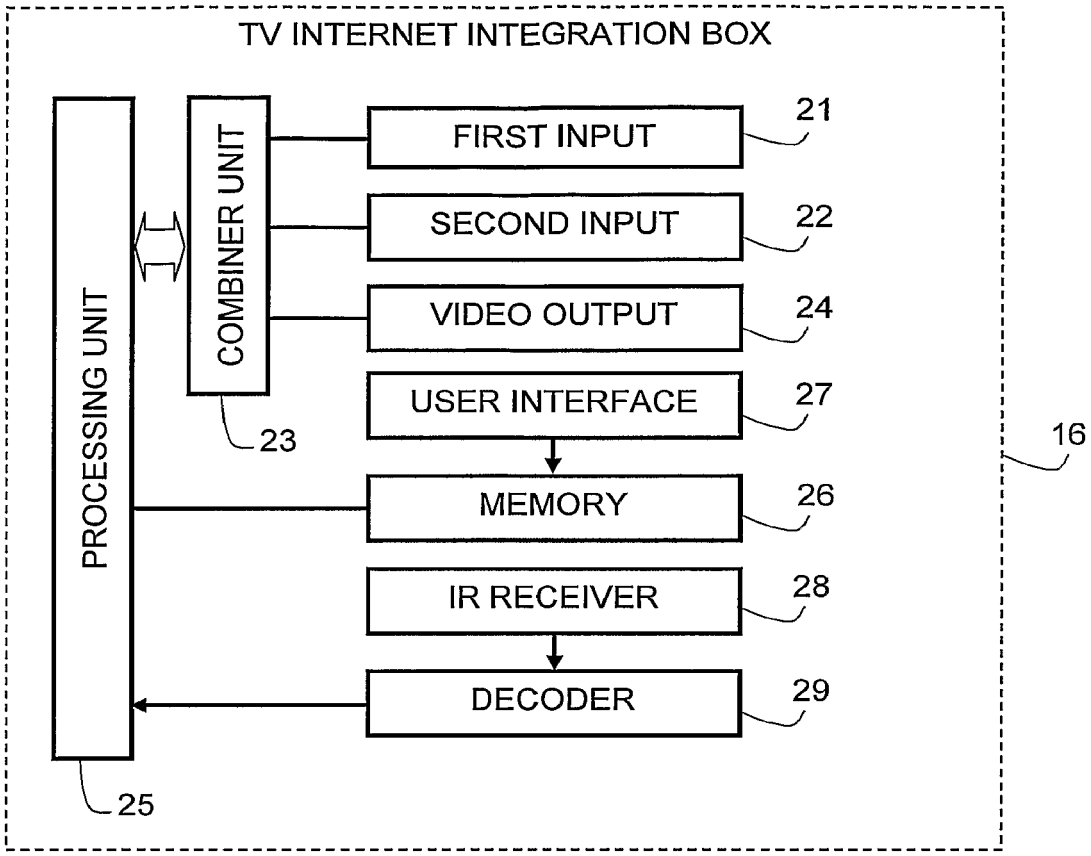

TV INTERNET INTEGRATION BOX
PROCESSING UNIT
COMBINER UNIT
FIRST INPUT
SECOND INPUT
VIDEO OUTPUT
USER INTERFACE
MEMORY
IR RECEIVER
DECODER
21
22
24
27
26
28
29
23
25
16

FIG. 5

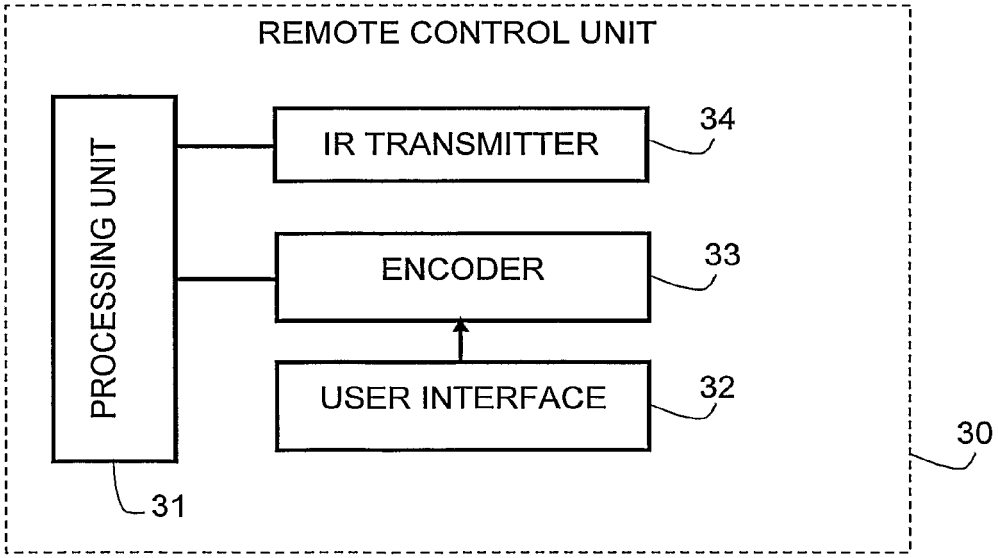

REMOTE CONTROL UNIT
PROCESSING UNIT
IR TRANSMITTER
ENCODER
USER INTERFACE
34
33
32
31
30

FIG. 6

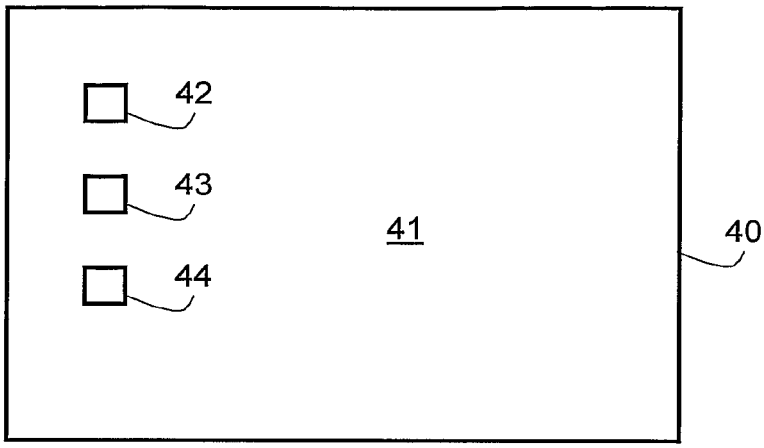


FIG. 7a

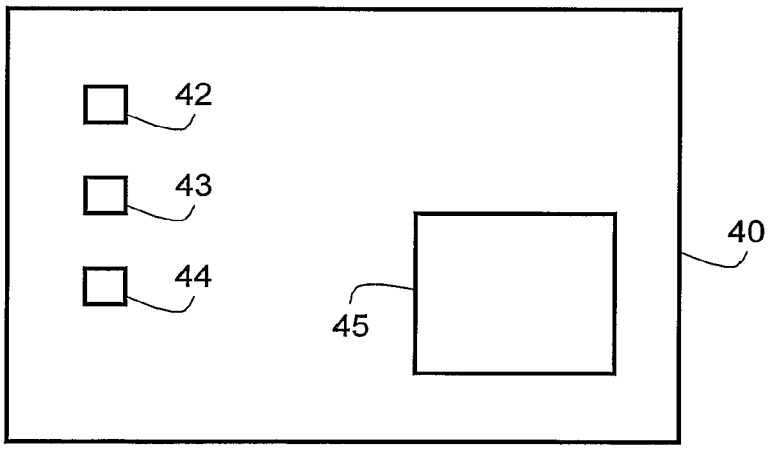


FIG. 7b

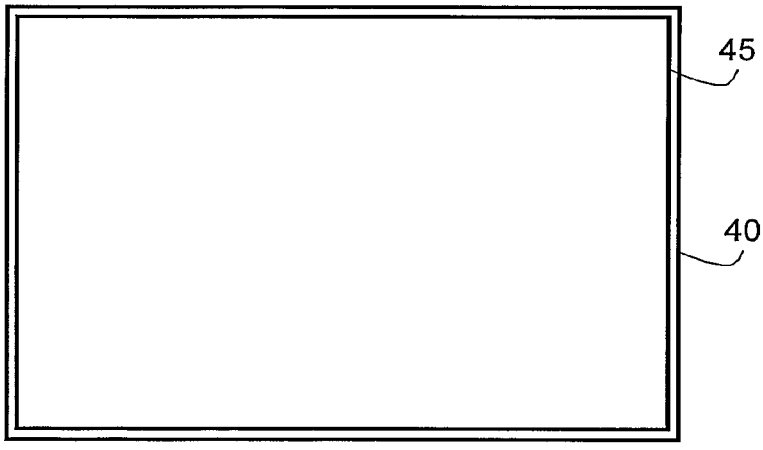


FIG. 7c

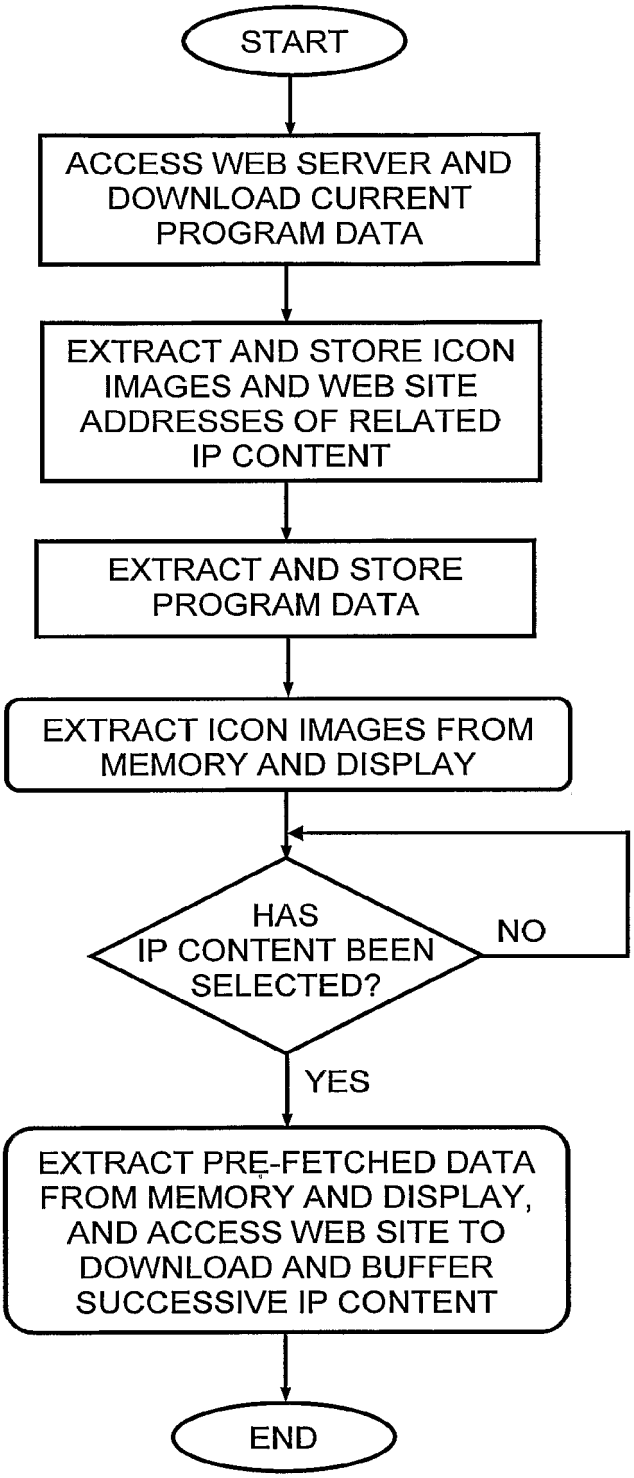

START
ACCESS WEB SERVER AND DOWNLOAD CURRENT PROGRAM DATA
EXTRACT AND STORE ICON IMAGES AND WEB SITE ADDRESSES OF RELATED IP CONTENT
EXTRACT AND STORE PROGRAM DATA
EXTRACT ICON IMAGES FROM MEMORY AND DISPLAY
HAS IP CONTENT BEEN SELECTED?
NO
YES
EXTRACT PRE-FETCHED DATA FROM MEMORY AND DISPLAY, AND ACCESS WEB SITE TO DOWNLOAD AND BUFFER SUCCESSIVE IP CONTENT
END

FIG. 8

FORMING OVERLAYS AT USER'S PREMISES AND UTILIZING THEM FOR SELECTIVE COMBINATIONS OF TV BROADCAST CHANNEL FORMAT MATERIAL AND IP-FORMAT MATERIAL

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue; a claim printed with strikethrough indicates that the claim was canceled, disclaimed, or held invalid by a prior post-patent action or proceeding.

This is a Continuation Application filed under 35 U.S.C. §120 as a continuation of U.S. patent application Ser. No. 11/794,825, filed on Jul. 6, 2007, which was a National Phase under 35 U.S.C. §371 of International Application No. PCT/IL2005/000035, filed on Jan. 11, 2005, the content of each of which is hereby incorporated by reference in their entirety.

FIELD OF THE INVENTION

This invention relates to the broadcast of audio/video content over the TV infrastructure and Internet.

BACKGROUND OF THE INVENTION

With the proliferation of cable TV and the high bandwidth currently available for the Internet, which promises to increase even more in the near future, Internet TV is fast becoming a viable alternative to regular and cable TV broadcast channels. Moreover, Internet TV is not subject to the government licensing laws required by cable and broadcast TV channels and thus offers programs that may not be obtainable using regular and cable TV broadcast channels.

It is not uncommon for Internet broadcasters to offer near DVD-quality movies that can be viewed either using video streaming or downloaded to the hard disk of a subscriber's computer for viewing "off-line". The video quality of such movies is vastly superior to that obtainable on a regular TV set, owing to the high resolution associated with computer displays that cannot presently be matched by TV screens. However, this is not particularly troublesome where only pictures are displayed; but it becomes a problem when textual information is displayed that is formatted for high resolution computer monitors since the text is then barely legible when displayed on lower resolution TV screens. Thus, if a regular TV set is used to display Internet content that is rich in text, the resulting display quality is poor.

It would therefore be a significant benefit to users of low resolution displays such as TV screens, to be able to watch regular and cable TV broadcasts and to integrate with Internet content on demand. In particular, it would be desirable to provide such a user with a visual and legible indication when viewing a regular or TV broadcast of available Internet movies or other programs and allow him to use the displayed indication to integrate with a desired Internet broadcast.

These requirements have been only partially addressed in the art. WO 00/08855 to United Video Properties, Inc. and entitled "A system and method for synchronizing television-related product content and internet-delivered information" describes a screen generator that merges program guide data with a TV image and superimposes an Interactive TV Guide on the regular TV image.

US 2002/0093594 (Kikinis) entitled "Method and system for identifying addressing data within a television presentation" illustrates in FIG. **5** the common connection of TV and Internet to a set-top box.

U.S. Pat. No. 6,606,746 to OpenTV, Inc. entitled "Interactive television system and method for displaying a graphical user interface using insert pictures" discloses interactive television having a compressed background picture and one or more compressed insert pictures commonly connected to a TV-Internet Integration box. The compressed insert pictures represent items of a GUI. The local system i.e. computer "pastes" the insert pictures into the background image.

U.S. Pat. No. 6,130,898 to Bell Atlantic Network Services, Inc., entitled "Simulcasting digital video programs for broadcast and interactive services" teaches an interactive TV system where TV broadcast data is merged with Internet data. To this end, public wireless packet data network is combined with a broadband digital broadcast network at a plurality of transmitter sites. Customer premises receiving systems include a receiving antenna and one or more digital entertainment terminals. The terminal includes a channel selector and digital receiver for capturing a digital transport stream from a selected channel. A processor converts selected program information from the transport stream for presentation, e.g. via a television set. The terminal also includes a CPU controlling the operation of the channel selector and the processor in response to user inputs.

None of these references appears to disclose the ability to merge broadcast TV signals with IP packet data at a customer site, specifically in such a manner that a conventional TV set is able to display Internet program selection data while viewing a TV broadcast program and to use the selected data to select an Internet channel, such as a movie, for display on the TV set instead of the TV broadcast program.

SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide a TV-Internet Integration Box having the ability to merge broadcast TV signals with IP packet data at a customer site.

It is a further object that such a TV-Internet Integration Box permits a TV set connected thereto to display Internet program selection data while viewing a TV broadcast program and to use the selected data to select an Internet movie for display instead of the TV broadcast program.

These objectives are realized in accordance with a first aspect of the invention by a method for facilitating first data broadcast over a TV subscriber channel to be displayed simultaneously together with second data broadcast over a digital data communications network, the method comprising:

receiving said first data and said second data;

combining said first data and said second data to form a combined video signal; and

conveying said combined video signal to a TV set in a user premises for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data, said second image being configured to allow a user at said user premises to interact therewith for redirecting to the digital data communications network and displaying a program broadcast thereby in at least a portion of the TV set.

In accordance with a second aspect of the invention there is provided a method for facilitating first data broadcast over a TV subscriber channel to be displayed simultaneously together with second data broadcast over a digital data communications network, the method comprising:

receiving said first data at a user premises;

receiving said second data at the user premises according to a user-profile associated with the second data;

combining said first data and said second data to form a combined video signal; and

conveying said combined video signal to a TV set in a user premises for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data, said second image being configured to allow a user at said user premises to interact therewith redirecting to the digital data communications network and displaying a program broadcast thereby in at least a portion of the TV set.

BRIEF DESCRIPTION OF THE DRAWINGS

In order to understand the invention and to see how it may be carried out in practice, a preferred embodiment will now be described, by way of non-limiting example only, with reference to the accompanying drawings, in which:

FIG. **1** is pictorial representation showing a TV-Internet Integration Box according to the invention connected to a mixed broadcast network for combining Internet and broadcast TV signals;

FIG. **2** is a flow diagram showing the principal actions carried out by the web server shown in FIG. **1**;

FIG. **3** is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box shown in FIG. **1**;

FIG. **4** is a flow diagram showing the principal actions carried out by an IP content provider such as an advertiser for creating IP content for overlaying by the TV-Internet Integration Box with a broadcast TV signal;

FIG. **5** is a block diagram showing the functionality of the TV-Internet Integration Box shown in FIG. **1**;

FIG. **6** is a block diagram showing the functionality of a remote control unit for interfacing with the TV-Internet Integration Box shown in FIG. **5**;

FIGS. **7**a, **7**b and **7**c are pictorial representations showing a TV set during different stages of receiving and displaying combined Internet and broadcast TV signals; and

FIG. **8** is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box when pre-fetching a digital broadcast signal.

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

FIG. **1** is pictorial representation showing a mixed broadcast network **10** having a Cable TV Box **11** coupled to a satellite **12** and a Cable TV transmitter **13** for receiving a cable TV broadcast signal (constituting first data). An Internet broadcast signal comprising IP packet data (constituting second data) is streamed from a web server **14** via the Internet **15** (constituting a digital data communications network) to a TV-Internet Integration Box **16** (*e.g., including a circuit, processor, etc.*) for display on a TV set **17** coupled thereto. The TV set **17** may be constituted by a computer having a video card and a high resolution display monitor. However, the principal benefit of the invention is obtained when a regular TV set having low resolution is used, since such a configuration has not so far been used to integrate Internet programs with conventional TV broadcasts in the manner proposed by the invention. The TV-Internet Integration Box **16** is connected to the Cable TV Box **11** for combining the broadcast TV signals received by the Cable TV Box **11** with the IP packet data broadcast via the Internet **15**. Also shown is an advertiser **18** having a computer coupled to the Internet **15** for downloading advertising content to the web server **14** for storage in a database **19** and a telephone **20** coupled to the TV-Internet Integration Box **16** for feeding telephony signals to the TV-Internet Integration Box **16**, which combines the received telephony signals with video data received from the Cable TV Box **11** and/or the Internet **15**.

The advertiser **18** typically pays for specific time slots and for one or more specific channels during which his advertisement will be broadcast. Thus, in addition to the advertising content which is prepared and then stored on the web server **14** in known manner, the advertiser **18** also specifies when the advertisement is to be broadcast and on which TV channel or channels. By such means, a sports advertiser can request time during the interval of a football match to broadcast a commercial, while a toy advertiser would obviously prefer to broadcast a commercial during a children's TV program. Different time slots may be charged out at different rates depending on the ratings associated with the associated TV program. After selecting one or more time slots, the advertisement content as well as the selected time slots and program data are stored in the database **19** accessed by the web server **14**.

FIG. **2** is a flow diagram showing the principal actions carried out by the web server **14**, which is responsive to an event timetable stored and updated in the database **19**. To this end, an IP content provider interfaces with the web server for creating IP content and associating therewith calendar and program data indicating dates, times and channels in respect of which the IP content is to be streamed to the customer premises. Once this is done, the web server **14** monitors events, which are triggered in known manner causing the web server **14** to extract from the database **19** pre-stored IP content for streaming over the Internet **15** to the TV-Internet Integration Box **16**, where it is processed as described below with reference to FIG. **3** of the drawings.

FIG. **3** is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box **16**. In accordance with one embodiment of the invention, the subscriber selects what kind of IP content he wishes to receive and in respect of which program details, such as icons and/or textual data, are to be displayed together with the TV broadcast data. For example, a subscriber may wish to block certain types of program material or may wish to **[**receives**]** *receive* details thereof only during limited hours, for example when the children are asleep. To this end, the subscriber is able to program the TV-Internet Integration Box **16** in much the same way that a video cassette recorder is programmed so as to store in the memory **[25]** *26* a timetable indicating what type of IP data is to be displayed and when. The timetable is updated as and when required by the subscriber. The TV-Internet Integration Box **16** is adapted to check the timetable periodically and to filter out incoming IP content that is either of a type that is not required or that is broadcast during an unauthorized time window. By such means, an additional layer of authorization may be provided to that stored in the database **19** for access by the web server **14**, thus allowing pre-fetching of IP content and storage in the memory **[25]** *26* of the TV-Internet Integration Box **16**. Upon detecting a matching event, corresponding to received IP content that is of interest to the

subscriber, the TV-Internet Integration Box **16** overlays the matched IP content with the current broadcast and displays the new integrated video on the subscriber's TV set **17**. For example, the matched information may be an icon that indicates to the subscriber that an Internet movie is currently being broadcast; or it may be an advertisement or information related to the TV program being broadcast.

The subscriber can respond to the overlaid data using a remote control unit, described below with reference to FIG. **6** of the drawings, which is programmed to interact with the displayed icon or other data that is overlaid on the TV broadcast. To this end, the displayed IP content may optionally contain textual information advising the subscriber to press a particular button on the remote control unit. Alternatively, buttons on the remote control unit may be color-coded and the icon may be colored so as to indicate to the subscriber which color-coded button to press for selection of the corresponding IP content. If the subscriber responds to the overlaid data by pressing a button on the remote control unit, the TV-Internet Integration Box **16** receives the signal from the remote control unit and changes the priorities for use with the Picture-in-Picture (PIP) technique to display the TV broadcast in a reduced window and to show the other media, i.e. the IP content, in an enlarged window. The IP content can be a custom designed web page for TV, or a game or advertisement movie or any other information placed on the matched record. PIP techniques are known per se and allow a video or graphics image to be inserted on top of a movie clip and to be positioned and sized. An Effect In and Effect Out may be used to fade or move the inserted video to the screen. In accordance with one such technique, the bulk of the IP content e.g. corresponding to a movie may be rendered transparent so as to provide a transparent window through which an icon e.g. relating to the movie is visible. The video content of the TV broadcast is displayed in one window and the IP content in another window. Since the bulk of the IP content is transparent it will remain invisible to the subscriber, while the icon (or text) will be visible since it is opaque. On selecting the displayed icon, the attributes may simply be reversed so as to hide the icon while displaying the movie or other content. At the same time, the TV broadcast may be re-sized either to display it in a minimized window it the case that it is to be suppressed altogether, or to display it superimposed on the IP content so that both are visible at the same time in different, possibly overlapping, windows.

FIG. **4** is a flow diagram showing the principal actions carried out by an IP content provider such as an advertiser for creating IP content for overlaying by the TV-Internet Integration Box with a broadcast TV signal. Thus, the advertiser designs an advertisement and sends it together with a request to a web site link via the Internet or off-line as required. Since the IP content is intended for display on a low resolution TV screen, any textual information that forms part of the IP content is formatted so as to be legible when displayed on lower resolution TV screens. Generally, this requires reducing the quantity of textual information to a minimum and sizing any text so that it is legible. Often, a web advertiser will wish to create an on-line advertisement based on an existing web page. In such case, it may be necessary to reduce and resize any textual information so as to comply with these requirements.

The request specifies calendar and program data as explained above, which the web site operator checks for availability and type, defining to which group of users it belongs. If the required time slots are available for the requested channels, the site operator confirms the request and forwards the request to the web control room for final confirmation. On confirming the request, a status flag of the advertisement is changed so as to indicate that the advertisement is awaiting final confirmation from the web control room. At the web control room the advertisement is checked for content by human evaluators who either approve or reject the advertisement content and, in the case of rejection, may provide reasons therefore. If the advertisement (or other IP content) is approved by the web control center, its status is set to "approved" and the web control center bills the customer and the web site operator adds the advertisement and the scheduling information to the database **19**. The customer who is billed is typically the advertiser but may be any entity that is identified by a digital signature associated with the advertisement. If either of the requests for approval is rejected the status of the advertisement is set to "rejected" and the web control room informs the advertiser of the grounds for rejection, allowing the advertiser to change the request and re-send to the web site operator. Optionally, in such case the web server may be adapted to display to the advertiser the occupied timetable and suggest new timetable. Only those advertisements whose status flag indicates that they are approved by the web control room are actually available for transmission. The time slot and channel information associated with any advertisement that is not so approved remain available for other advertisements and will be shown as available to another advertiser who attempts to schedule an advertisement. Only when the advertisement is actually approved by the web site operator and its status is updated accordingly, are the transmission time and channel locked for use by other users.

The IP packet data may optionally be associated with predefined user-profiles that are also stored in the database **19** so that the advertisement or other IP data is sent only to specific TV-Internet Integration Boxes. Such user-profiles may be configured by the advertiser or by the user. Thus, for example, the invention allows supplementary or complementary program content to be associated with a TV broadcast, while providing the facility to view the supplementary program content only to specific subscribers, according to their user-profiles.

Thus, by way of non-limiting example, the invention allows sign language to be associated with a TV broadcast for the hard of hearing. It is known to display sign language in a corner of the screen, but since this is usually done indiscriminately it also apt to disturb the majority of viewers who do not need the sign language. The invention may be used to avoid this by conveying the sign language as IP content separate from main TV broadcast and allowing subscribers to register for a "sign language" service so that only registered subscribers receive the IP content. IP content files corresponding to sign language to be associated with different TV broadcasts are created as explained above, and stored in the database **19** together with user-profile data indicating which subscribers are registered to obtain the service. The user-profile data may contain data that further refines the target audience, such as categories of TV program alongside which the sign language is to be displayed. The user-profile data may further contain geographical data or language data that allows sign language corresponding to a target language to be conveyed to specific audiences. By such means, a TV program can be accompanied by a sign language overlay that is customized to a target language depending on the location of the IP target address or the language requested by the subscriber on registering for the service.

FIG. **5** is a block diagram showing the functionality of the TV-Internet Integration Box **16** shown in FIG. **1**. Thus, the TV-Internet Integration Box **16** comprises a first input **21** for receiving first data corresponding to a TV broadcast signal, typically being a cable TV signal and a second input **22** for receiving respective second data corresponding to IP packet data. The IP packet data may optionally be downloaded to specific TV-Internet Integration Boxes in accordance with predefined user-profiles associated with IP packet data and stored in the database **19**. A combiner unit **23** (*e.g., including a circuit*) is coupled to the first and second inputs for combining the first data and the second data to form a combined video signal. A video output **24** is coupled to the combiner unit **23** for conveying the combined video signal to a TV set in a user premises. The TV set may be a conventional TV having a relatively low resolution screen for displaying a first image corresponding to the first data and having superimposed thereon a second image corresponding to the second data. Alternatively, it can be a computer having a video card for displaying a combined video image on a high resolution display monitor.

The combiner unit **23** is shown coupled to a processing unit **25** although in practice it may be implemented in software by the processing unit **25**. A memory **26** is coupled to the processing unit **25** for storing program data, such as profiles and program timetables etc. so as to allow the processing unit **25** to filter incoming IP content according to pre-defined profiles and other selection data. The processing unit **25** is also coupled to a user interface **27** that allows the subscriber to program the TV-Internet Integration Box **16** and store the program data in the memory **26**. An IR receiver **28** is adapted to receive IR commands from a remote control unit described below with reference to FIG. **6** and is coupled to a decoder **29**, which decodes a received IR signal and feeds it to the processing unit **25** for further processing.

FIG. **6** is a block diagram showing the functionality of a remote control unit **30** for interfacing with the TV-Internet Integration Box **16** shown in FIG. **5**. The remote control unit **30** includes a processing unit **31** coupled to a user interface **32**, typically having a keypad or pushbuttons for program selection and setting as well as other functions. The user interface **32** is coupled to an encoder **33** which is responsive to a pressed key or key combination for producing a corresponding IR signal that is transmitted by an IR transmitter **34** to the TV-Internet Integration Box **16** for receipt by the IR receiver **28** thereof.

As noted above, the keys may be color coded in correspondence with pre-arranged colors of commonly displayed icons, so that pressing on a specific key activates the displayed icon of the same color. Alternatively, at least some of the keys may be covered with transfers depicting commonly displayed icons, whereupon the appropriate keys or button for activating each icon are easily recognized.

The keys may also be programmed so that depressing the same key more than once automatically re-sizes the windows containing the TV broadcast and the Internet broadcast. For example, FIG. **7**a shows the default situation where a TV screen **40** displays a conventional TV broadcast in a window **41** that is sized to occupy the whole area of the TV screen **40** and will be referred to as the primary window. Also shown are IP icons **42**, **43** and **44** each of which points to a different IP content that is streamed from a respective web site of known address. On pressing the key on the remote control unit **30** that corresponds to the icon **42**, the IP content corresponding thereto is displayed within a small window **45** (referred to as the secondary window) that is contained within the primary window **41** as shown in FIG. **7**d. The icons **42**, **43** and **44** remain visible so that, if desired, the selected program can be changed by pressing a different key on the remote control unit **30**. On pressing a key a second time in succession, the IP content is re-sized so that its window **45** occupies substantially the whole area of the screen as shown in FIG. **7**c. On pressing the key a third time in succession, the situation reverts to the default shown in FIG. **7**a where the primary window **41** containing the TV broadcast occupies the whole area of the TV screen **40**. Thus, each key operates as a three-way toggle that switches between three different display modes.

The second data containing display information for the icons also contains data that informs the TV-Internet Integration Box **16** on which channel or channels the associated IP content is to be streamed and at what times. The second data also specifies the web site where the IP content is located. This is summarized in the following table:

TABLE I

Second data - definition			
Icon image	Channel	Time	Website of IP content
ICON.GIF	2; 23	19:30; 21:30	www.AB.com/adverts/123.htm

Thus, the second data depicted in Table I above shows that the icon image is contained in a file called ICON.GIF and that the IP content relating thereto is to be streamed on channels 2 and 23 at times 19:30 and 21:30, these being the start times. The end times are determined by the duration of the IP content to be streamed, which is downloaded from a web site whose name is shown in the table and is contained in the second data.

The second data is downloaded from the web server **14** whose web site address is known to the TV-Internet Integration Box **16**. In accordance with one embodiment, the processing unit **25** is programmed to access the web server **14** periodically and download current program data. For example, once every 2 to 3 hours the TV-Internet Integration Box **16** may automatically access the web server **14** to download the second data corresponding current program data for the next 3 hours as formatted according to Table I. The downloaded information is stored locally in the memory **26** of the TV-Internet Integration Box **16**. This allows the TV-Internet Integration Box **16** to pre-fetch IP content relating to all the currently displayed icons and to store the data relating thereto in the memory **26** thus obviating the need to access the web site of a selected icon for the purpose of downloading IP selected content. Since this carries the overhead of web access and downloading of data, which can be cumbersome particularly if there is insufficient bandwidth, pre-fetching in this manner ensures that initial IP content data will be immediately available on selection of one of the icons.

FIG. **8** is a flow diagram showing the principal actions carried out by the TV-Internet Integration Box when pre-fetching a digital broadcast signal. Thus, the TV-Internet Integration Box **16** periodically accesses the web server **14** and downloads current program data, constituting the second data. It then extracts from the current program data the image files of the current icons and stores them in the memory **26**. In like manner, it extracts the web sites of the IP content corresponding to the currently displayed icons and then accesses these sites to pre-fetch the respective IP content, which it likewise stores in the memory **26**. On selection of an icon, the TV-Internet Integration Box **16**

opens a secondary window **45** within the primary window **41**, reads from the memory **26** the pre-fetched IP content and displays it in the secondary window **45**.

It will be understood that the TV-Internet Integration Box according to the invention may be at least partially implemented by a suitably programmed computer. Likewise, the invention contemplates a computer program being readable by a computer for executing the method of the invention. The invention further contemplates a machine-readable memory tangibly embodying a program of instructions executable by the machine for executing the method of the invention.

The invention claimed is:

1. A method for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the method comprising:

(a) providing a combiner circuit at the user's premises, wherein:

the combiner circuit is coupled to a TV set and connected to a separate TV **[**timer**]** *tuner* box or TV tuner in the TV set, at the user's premises, and

the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the *separate* TV tuner box or *the* TV tuner in the TV set, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored,

an image indicative of the content associated with said overlay-enabling digital data, and

an overlay activation criterion; and

(b) processing at the user's premises said overlay-enabling digital data and generating at the user's premises a corresponding overlay only if said *overlay* activation criterion is met, wherein generating **[**an**]** *the* overlay includes:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, generate a second video display screen including at least a portion which corresponds to said content, and input the second display screen to said TV set.

2. The method according to claim **1**, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user profile.

3. The method according to claim **1**, further including: receiving a command from **[**a**]** *the* user at said user premises; and responsive to said command, resizing said first portion and/or said second portion of said first display screen.

4. The method according to claim **1**, wherein the content stored at said website enables streaming of digital data over the Internet; and

said method further including: pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

5. The method according to claim **1**, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored, and wherein said generating **[**an**]** *the* overlay further includes within said first display said one or more second images.

6. The method according to claim **1**, wherein the overlay-enabling digital data is supplementary or complementary to the video signals.

7. The method according to claim **1**, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

8. The method according to claim **1**, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

[9. The method according to claim **1**, wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.**]**

10. The method according to claim **5**, further including:

periodically accessing a web server for downloading said overlay-enabling digital data;

extracting from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieving and storing digital content from said web sites; and

if the overlay activation criterion is met and a user command that is associated with an image from amongst said one or more second images is identified, displaying the respective image from amongst the second images, accessing the respective web site associated with the displayed image and extracting and buffering content from the website.

11. The method according to claim **5**, further comprising displaying a respective IP content when a corresponding one of said one or more second images is selected.

12. The method according to claim **7**, including selecting specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

13. A TV-Internet Integration circuit for generating at a user's premises an overlay using video signals constituting a first data and overlay-enabling digital data constituting a second data, the TV-Internet Integration **[**Box**]** *circuit* comprising:

a combiner circuit at **[**a**]** *the* user's premises coupled to a separate TV tuner box or TV tuner,

wherein the combiner circuit is also connected through distinct networks to each of a video signal input providing video signals through the TV tuner box or TV tuner, and an Internet data input providing overlay-enabling digital data over the Internet,

wherein said video signals and said overlay-enabling digital data are received at the combiner circuit at the user's premises by different resources as mutually distinct and independent inputs, and

wherein said overlay-enabling digital data includes at least:

a Web link indicating a website where content that is associated with said overlay-enabling digital data is stored;

an image indicative of the content associated with said overlay-enabling digital data; and

an overlay activation criterion, wherein

the combiner circuit is responsive to **[**an**]** *the* overlay activation criterion being met for generating a corresponding overlay, including:

generating at the user's premises a first display screen including at least a first portion corresponding to said video signals and a second portion overlaid over said first portion and corresponding at least to said image, and

associating the Web link with said second portion of the first display screen thereby allowing a user to cause the combiner circuit to retrieve said content, and generate a second video display screen including at least a portion which corresponds to said content; and

a video output interface, coupled to or integrated within the combiner circuit and configured to be coupled to a video input of said TV set and to display said first display screen or said second video display screen.

14. The TV-Internet Integration circuit according to claim **13**, wherein said overlay-enabling digital data is received at the user premises according to a pre-stored user-profile.

15. The TV-Internet Integration circuit according to claim **13**, further including:

a command input for receiving a command from **[**a**]** *the* user at said user premises; and

a frame adjuster for resizing said first portion and/or said second portion of said first display screen in response to said command.

16. The TV-Internet Integration circuit according to claim **13**, further including:

a receiver for receiving a digital data stream, wherein the stream of the digital data is enabled by the content stored at said website; and

a processing unit for pre-fetching and buffering said digital data stream from said website, thereby allowing said digital data stream to be displayed substantially without delay upon redirection by the user.

17. The TV-internet Integration circuit according to claim **13**, wherein the overlay-enabling digital data comprises data representative of one or more second images, and for each of said one or more second images said overlay-enabling data comprises respective web site addresses where IP content associated with the respective second image is stored,

and wherein the combiner circuit is configured to:

periodically access a web server for downloading said overlay-enabling digital data;

extract from the overlay-enabling digital data said one or more second images and the respective web sites corresponding to each of said second images;

retrieve and store digital content from said web sites; and

if the overlay activation criterion is met, and a user command that is associated with an image from amongst said one or more second images is identified, display the respective image from amongst the second images, access the respective web site associated with the displayed image and extract and buffer content from the website.

18. The TV-Internet Integration circuit according to claim **13**, wherein the image includes an icon that indicates to the user that digital data from Internet content is currently being provided and which provides an indication of a nature of said Internet content.

19. The TV-Internet Integration circuit according to claim **13**, wherein the image contains textual information advising the user to press a particular button on a remote control unit.

[20. The TV-Internet Integration circuit according to claim **13**, wherein said overlay activation criterion includes at least one of the following: a timing information, data specifying one or more TV subscriber channels, a user command information.**]**

21. The TV-Internet Integration circuit according to claim **18**, wherein the icon is colored so as to allow user selection of a specific Internet content by pressing a color-coded button on a remote control in accordance with a color of said icon.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,612	07/18/2022	Yakkov MERLIN	103692.0001US4re	8539

24392 7590 03/04/2025

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EXAMINER	
BASEHOAR, ADAM L	

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
03/04/2025	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents@fishiplaw.com

APPLICATION NO.	ISSUE DATE	PATENT NO.
17/867,612	04-Mar-2025	RE050328

FISH IP LAW, LLP
19900 MacArthur Blvd, Suite 810
Irvine, CA 92612

EGRANT NOTIFICATION

Your electronic patent grant (eGrant) is now available, which can be accessed via Patent Center at https://patentcenter.uspto.gov

The electronic patent grant is the official patent grant under 35 U.S.C. 153. For more information, please visit https://www.uspto.gov/electronicgrants

Samsung
Ex. 1031 - Page 548