WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/36826

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Box No. V: Citations and Explanations-***-

As to claim 12, Yamamoto discloses the tangible computer readable medium as defined in claim 11, further comprising: instructions to receive a second selection for a user interface containing information about the item of content or the content source (a display controller which generates the image data for the on-screen menu with a two-dimensional array which includes a first array comprising the plurality of function icons arranged in a specific direction on a screen and which also includes a second array comprising the plurality of content icons in a direction intersecting the specific direction on the screen, column 2, lines 2-9); based on the second selection, instructions to present the information about the item of content or the content source (The display controller displays the second array to intersect the first array at a position of one of the function icons selected by the user, and, if the contents are hierarchically stored in the storage, displays an expanded view of the content icons in the second array such that the hierarchy is represented visually or auditorily, column 2, lines 9-14); and based on the second selection, instructions to present the badge, associated with the item of content or the content source, with the information the item of content or the content source (the contents are hierarchically stored in the storage, displays an expanded view of the content icons (badge) in the second array such that the hierarchy is represented visually or auditorily and the term "content" refers to information including moving images, still images, audio, texts and programs that are played, displayed or run by respective types of information conveying means, column 2, lines 9-19).

As to claim 16, Yamamoto discloses an intelligent television comprising: a display; a memory (a television set 30 onscreen display with a onscreen buffer 102 that temporally stores storage/memory) column 5, lines 53-57); a processor in communication with the memory and the display, the processor operable to (the processor 108 displays content icons, column 8, lines 10-12): receive a selection associated with the item of content or the content source (a plurality of function icons (associating badges) representing respective types of content playing functions, column 2, lines 32-35); based on the selection, associate a badge with the item of content or the content source, wherein a badge is a user interface device having visual indicia that indicates the item of content or the content source includes a feature, a state, or a designation (A moving image icon, which is a function icon displayed in an area of intersection in which the array of function icons and the array of content icons intersect, is highlighted by a color different from that of the other function icons and by an enlarged view, abstract).

As to claim 17, Yamamoto discloses the intelligent television as defined in claim 16, wherein the processor is further operable to: receive a second selection for a user interface containing information about the item of content or the content source (a display controller which generates the image data for the on-screen menu with a two-dimensional array which includes a first array comprising the plurality of function icons arranged in a specific direction on a screen and which also includes a second array comprising the plurality of content icons in a direction intersecting the specific direction on the screen, column 2, lines 2-9); based on the second selection, present the information about the item of content or the content source (The display controller displays the second array to intersect the first array at a position of one of the function icons selected by the user, and, if the contents are hierarchically stored in the storage, displays an expanded view of the content icons in the second array such that the hierarchy is represented visually or auditorily, column 2, lines 9-14); and based on the second selection, present the badge, associated with the item of content or the content source, with the information the item of content or the content source (the contents are hierarchically stored in the storage, displays an expanded view of the content icons (badge) in the second array such that the hierarchy is represented visually or auditorily and the term "content" refers to information including moving images, still images, audio, texts and programs that are played, displayed or run by respective types of information conveying means, column 2, lines 9-19).

Claims 5-8, 13-15 and 18-20 lack an inventive step under PCT Article 33(3) as being obvious over Yamamoto in view of US 8151215 B2 Baurmann et al. (hereinafter "Baurmann").

As to claim 5, Yamamoto discloses the method as defined in claim 4, Yamamoto fails to disclose wherein the designation is a favorite designation. Baurmann discloses wherein the designation is a favorite designation (icons that arc associated with favorite TV channels, column 1, lines 29-34). It would have been obvious to one skilled in the art at the time of the invention to modify the Yamamoto system to include the designation is a favorite designation features taught by Baurmann because doing so would make the Yamamoto system more flexible and user-friendly.

As to claim 6, the combination of Yamamoto and Baurmann discloses the method as defined in claim 5. Yamamoto fails to disclose wherein the badge is a star or a banner. Baurmann discloses wherein the badge is a star or a banner (the objects or icons 46, can be invoked from the remote control 22 by pressing the favorites key 30. If there is on-screen display (OSD) text on the screen e.g., a banner when Favorites is pressed, the OSD can be removed and the favorites icons 46 displayed, column 4, lines 44-49). It would have been obvious to one skilled in the art at the time of the invention to modify the Yamamoto system to include the designation is a star or a banner designation features taught by Baurmann because doing so would make the Yamamoto system more flexible and user-friendly.

As to claim 7, the combination of Yamamoto and Baurmann discloses the method as defined in claim 4. Yamamoto fails to disclose wherein the state is as new content. Baurmann discloses wherein the state is as new content (items may display when user first accesses New Favorites (new content), column 6, lines 54-56). It would have been obvious to one skilled in the art at the time of the invention to modify the Yamamoto system to include the designation of new content features taught by Baurmann because doing so would make the Yamamoto system more flexible and user-friendly.

As to claim 8, the combination of Yamamoto and Baurmann discloses the method as defined in claim 7. Yamamoto fails to disclose wherein the badge is a fresh badge. Baurmann discloses wherein the badge is a fresh badge (the GUI 42 revolves left or right across the display, moving a new icon (fresh badge) into the center-most focused spot and enlarging it relative to the other icons, column 3, lines 46-50). It would have been obvious to one skilled in the art at the time of the invention to modify the Yamamoto system to include the designation of fresh badge (new icon) features taught by Baurmann because doing so would make the Yamamoto system more flexible and user-friendly.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/36826

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claims 13 and 18, Yamamoto discloses the tangible computer readable medium as defined in claims 12 and 17. Yamamoto fails to disclose wherein: if the designation is a favorite designation, the badge is a star or a banner; if the state is as new content, the badge is a fresh badge; and if the state is a paused playback, the badge is an in-progress badge. Baurmann discloses wherein: if the designation is a favorite designation (icons that are associated with favorite TV channels, column 1, lines 29-34), the badge is a star or a banner (the objects or icons 46, can be invoked from the remote control 22 by pressing the favorites key 30. If there is on-screen display (OSD) text on the screen e.g., a banner when <Favorites> is pressed, the OSD can be removed and the favorites icons 46 displayed, column 4, lines 44-49); if the state is as new content (items may display when user first accesses New Favorites (new content), column 6, lines 54-56), the badge is a fresh badge (the GUI 42 revolves left or right across the display, moving a new icon (fresh badge) into the center-most focused spot and enlarging it relative to the other icons, column 3, lines 46-50); and if the state is a paused playback (The instruction determination module 94 acquires instructions such as "content playing", "pause playing" (pause playback) and "invoke on-screen menu" entered by the user manipulating the controller 42, column 4, line 66 and column 5, line 3), the badge is an in-progress badge (The instruction determination module 94 acquires instructions such as "content playing" (in progress icon), "pause playing" (pause playback) and "invoke on-screen menu" entered by the user manipulating the controller 42, column 4, line 66 and column 5, line 3). It would have been obvious to one skilled in the art at the time of the invention to modify the Yamamoto system to include favorites, a star or banner, new content, fresh badge, paused playback and in-progress features taught by Baurmann because doing so would make the Yamamoto system more flexible and user-friendly.

As to claims 14 and 19, the combination of Yamamoto and Baurmann discloses the tangible computer readable medium as defined in claims 13 and 18. Yamamoto further discloses wherein the badge is presented in one of a panel, an electronic programming guide, or a menu (A broadcast icon 58 is an icon that represents the broadcast display function and is selected to view a television program input via the antenna cable 32 and The content information 65 may include the name of a broadcasting station, the name of a broadcast channel, the title of a program or broadcast schedule acquired based on Electronic Program Guide (EPG) data, column 8 line 66 – column 9 line 7).

As to claims 15 and 20, Yamamoto discloses the tangible computer readable medium as defined in claims 12 and 19. Yamamoto fails to disclose wherein the second selection is a paused playback and the badge is an in-progress indicator presented in a panel with a paused content display. Baurmann discloses wherein the second selection is a paused playback and the badge is an in-progress indicator presented in a panel with a paused content display (The instruction determination module 94 acquires instructions such as "content playing" (in-progress indicator), "pause playing" (pause playback) and "invoke on-screen menu" (presented n a panel) entered by the user manipulating the controller 42, column 4, line 66 and column 5, line 3). It would have been obvious to one skilled in the art at the time of the invention to modify the Yamamoto system to include paused playback and in-progress features taught by Baurmann because doing so would make the Yamamoto system more flexible and user-friendly.

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

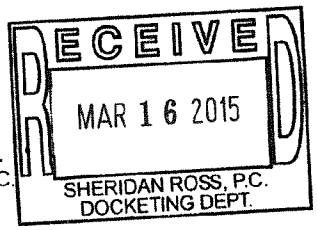
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



WILSON, Tadd, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
26 February 2015 (26.02.2015)	
Applicant's or agent's file reference: 6583-434-PCT	IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055342	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant: FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

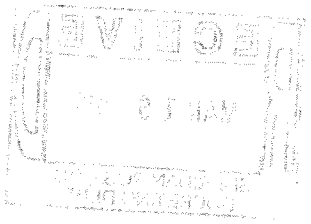
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Athina Nickitas-Etienne

e-mail: pt04.pct@wipo.int

VIZIO Ex. 1002, Page 3212 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-434-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055342	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☒	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Athina Nickitas-Etienne e-mail: pt04.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: TADD F. WISON
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	17 APR 2014

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-434-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055342	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2014.01)
USPC - 725/56

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	09 April 2014	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055342

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055342

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the appicable time limit:

   ☐ paid additional fees

   ☐ paid additional fees under protest and, where applicable, the protest fee

   ☐ paid additional fees under protest but the applicable protest fee was not paid

   ☒ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

   ☐ complied with

   ☒ not complied with for the following reasons:

See Supplemental Box

4. Consequently, this opinion has been established in respect of the following parts of the international application:

   ☐ all parts

   ☒ the parts relating to claims Nos. 1-2

Form PCT/ISA/237 (Box No. IV) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055342

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	None	YES
	Claims	1, 2	NO
Inventive step (IS)	Claims	None	YES
	Claims	1, 2	NO
Industrial applicability (IA)	Claims	1, 2	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-2 lack novelty under PCT Article 33(2) as being anticipated by Wetzer et al., hereinafter referred to as Wetzer.

Regarding claims 1, 2, Wetzer discloses a method for providing an indication of a linkage to a poster of social media [claim 1] (further fig.29 F shows a gettogether session interface wherein participants who accept the invitation join a session, that allows participants to chat with each other through the text chat interface, further the interface shows messages 2927 between users, wherein a message from a first user is displayed with the name of that user i.e. "Jennifer Coulter" [first visual indicia indicate the linkage between a first poster of the first posting] and a message from a second user is displayed with the name of that user i.e. "Mark Daniels", para 0209, 0210), the method comprising, and an intelligent television (user device 118 (e.g., an intelligent TV) is a user platform operated by a user to facilitate display of and interaction with secure user-centric information, Fig 1, para 0050, 0059) system [claim 2] comprising: a memory operable to store social media data; a processor in communication with the memory, the processor operable to (user devices 118 serve as a platform operated by a user 116 to facilitate display and interaction, the user devices 118 of user 116 includes a portable device/tablet and an intelligent television, mobile device, para 0059; fig.22 shows an alert notification appears in the display of the tablet device 1310, indicating that a friend is also watching Fringe [an intelligent television used to view social media notifications is interpreted as stores social media data with a processor in communication to a memory], para 0014, 0195): receiving, by a processor of an intelligent television (user device 118 (e.g., an intelligent TV) is a user platform operated by a user to facilitate display of and interaction with secure user-centric information, Fig 1, para 0050, 0059), two or more social media postings (user devices 118 serve as a platform operated by a user 116 to facilitate display and interaction, the user devices 118 of user 116 includes a portable device/tablet and an intelligent television, mobile device, para 0059; fig.29A shows a user 116 watching a show on TV 1340 using a tablet device 1310, further fig.29C shows an interface where a user invites other users/participants who are contacts of the user 116, para 0202, 0203; further fig.29 F shows a gettogether session interface wherein participants who accept the invitation join a session, that allows participants to chat with each other through the text chat interface, further the interface shows messages 2927 between users "Jennifer Coulter" and "Mark Daniels" [two or more social media postings] , para 0209, 0210); execute a user interface application in communication with the social media application, the user interface application operable to [claim 2] (further fig.29 F shows a gettogether session interface wherein participants who accept the invitation join a session, that allows participants to chat with each other through the text chat interface, further the interface shows messages 2927 between users "Jennifer Coulter" and "Mark Daniels" [two or more social media postings] , para 0209, 0210): providing a visual representation of the social media postings (further fig.29 F shows a gettogether session interface wherein participants who accept the invitation join a session, that allows participants to chat with each other through the text chat interface, further the interface shows messages 2927 between users "Jennifer Coulter" and "Mark Daniels" [providing a visual representation of two or more social media postings] , para 0209, 0210); in the visual representation, providing a first visual indicia for a first posting and a second visual indicia for a second posting (further fig.29 F shows a gettogether session interface wherein participants who accept the invitation join a session, that allows participants to chat with each other through the text chat interface, further the interface shows messages 2927 between users, wherein a message from a first user is displayed with the name of that user i.e. "Jennifer Coulter" [first visual indicia for a first posting] and a message from a second user is displayed with the name of that user i.e. "Mark Daniels" [second visual indicia for a second posting], para 0209, 0210); and wherein the first and second visual indicia are different and indicate the linkage between a first poster of the first posting or a second poster of the second posting (further fig.29 F shows a gettogether session interface wherein participants who accept the invitation join a session, that allows participants to chat with each other through the text chat interface, further the interface shows messages 2927 between users, wherein a message from a first user is displayed with the name of that user i.e. "Jennifer Coulter" [first visual indicia indicate the linkage between a first poster of the first posting] and a message from a second user is displayed with the name of that user i.e. "Mark Daniels" [second visual indicia different from first visual indicia], the chat session messages between the users provides the users to communicate with each other by sending texts, pictures and videos, para 0209, 0210).

Claims 1-2 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055342

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claims 1-2, drawn to a method for providing an indication of a linkage to a poster of social media, an intelligent television comprising: providing a first visual indicia for a first posting and a second visual indicia for a second posting wherein the first and second visual indicia are different and indicate the linkage between a first poster of the first posting or a second poster of the second posting.
Group II, claims 3-4, drawn to a method for providing a rooting section for an intelligent television, comprising: based on a received selection of sporting content, providing a first visual representation of one or more of the social media postings associated with a first team affiliation and providing a second visual representation of one or more of the social media postings associated with a second team affiliation.
Group III, claims 5-6, drawn to a method for providing social media on an intelligent television, comprising: identifying a user of the intelligent television and registering the user with one or more social media sites, and providing social media posting associated with the user on an user interface of the intelligent television.
Group IV, claims 7-8, drawn to a method for providing social media information on an intelligent television, comprising: determining the availability of social media for the selected programming and providing a visual representation of one or more of the social media postings associated with selected programming.
Group V, claims 9-10, drawn to a method for providing social media information on an intelligent television, comprising: receiving a second selection to change a volume of social media, and changing an amount of social media presented in response to the second selection.
Group VI, claims 11-12, drawn to a method for providing social media information on an intelligent television, the comprising: the intelligent television discovering a device also connected to the network, connecting the device to the intelligent television, a user pushes a social media message from the device, and displaying the social media message on the intelligent television.
Group VII, claims 13-14, drawn to a method for providing media on an intelligent television, comprising: retrieving available media from one or more social media sources and from one or more local sources and presenting together media from both one or more social media sources and one or more local sources.
Group VIII, claims 15-16, drawn to a method for providing social media on an intelligent television, comprising: receiving a programming change input and providing determining the type of programming changing input one of two or more user interfaces that include a presentation of social media information.
Group IX, claims 17-18, drawn to a method for providing social media on an intelligent television, comprising: pausing the media playback on the intelligent television while the media continues to be presented in real-time and during the pause, receiving one or more social media postings associated with the media, and storing the one or more social media postings in a time sequence correlated to the media presentation.
Group X, claims 19-20, drawn to a method for providing social media on an intelligent television, comprising: receiving a selection of a control device on a remote control associated with an intelligent television and determining whether the selection is a first type or a second type, and providing a first user interface at the bottom of a display of the intelligent television wherein the first user interface provides at least one social media posting if the selection is a first type, and providing a second user interface at the top of the display of the intelligent television, wherein the second user interface provides information associated with content being presented in the display if the selection is a second type.
Group XI, claims 21-22, drawn to a method for publishing social media by an intelligent television, the comprising: receiving a selection of a control device associated with the intelligent television and automatically publishing information about the content to a social media site based on the selection.
Group XII, claim 23-24, drawn to a method for providing social media on an intelligent television, comprising: determining a state associated with a social media posting and providing a user interface for the social media application, having the social media posting displayed based on the state.

The inventions listed as Groups I-XII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention: providing a first visual indicia for a first posting and a second visual indicia for a second posting wherein the first and second visual indicia are different and indicate the linkage between a first poster of the first posting or a second poster of the second posting as claimed therein is not present in the invention of Groups II-XII. The special technical feature of the Group II invention: based on a received selection of sporting content, providing a first visual representation of one or more of the social media postings associated with a first team affiliation and providing a second visual representation of one or more of the social media postings associated with a second team affiliation as claimed therein is not present in the invention of Groups I, III-XII. The special technical feature of the Group III invention: identifying a user of the intelligent television and registering the user with one or more social media sites, and providing social media posting associated with the user on an user interface of the intelligent television as claimed therein is not present in the invention of Groups I, II, IV-XII. The special technical feature of the Group IV invention: determining the availability of social media for the selected programming and providing a visual representation of one or more of the social media postings associated with selected programming as claimed therein is not present in the invention of Groups I, II, III or V-XII. The special technical feature of the Group V invention: receiving a second selection to change a volume of social media, and changing an amount of social media presented in response to the second selection as claimed therein is not present in the invention of Groups I-IV, VI-XII. The special technical feature of the Group VI invention: the intelligent television discovering a device also connected to the network, connecting the device to the intelligent television, a user pushes a social media message from the device, and displaying the social media message on the intelligent television as claimed therein is not present in the invention of Groups I-V, VII-XII. The special technical feature of the Group VII invention: retrieving available media from one or more social media sources and from one or more local sources and presenting together media from both one or more social media sources and one or more local sources as claimed therein is not present in the invention of Groups I-VI or VIII-XII. The special technical feature of the Group VIII invention: receiving a programming change input and providing determining the type of programming changing input one of two or more user interfaces that include a presentation of social media information as claimed therein is not present in the invention of Groups I-VII or IX-XII.

[See Continuation on Next Extra Sheet]

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055342

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

The special technical feature of the Group IX invention: pausing the media playback on the intelligent television while the media continues to be presented in real-time and during the pause, receiving one or more social media postings associated with the media, and storing the one or more social media postings in a time sequence correlated to the media presentation as claimed therein is not present in the invention of Groups I-VIII or X-XII. The special technical feature of the Group X invention: receiving a selection of a control device on a remote control associated with an intelligent television and determining whether the selection is a first type or a second type, and providing a first user interface at the bottom of a display of the intelligent television wherein the first user interface provides at least one social media posting if the selection is a first type, and providing a second user interface at the top of the display of the intelligent television, wherein the second user interface provides information associated with content being presented in the display if the selection is a second type as claimed therein is not present in the invention of Groups I-IX or XI-XII. The special technical feature of the Group XI invention: receiving a selection of a control device associated with the intelligent television and automatically publishing information about the content to a social media site based on the selection as claimed therein is not present in the invention of Groups I-X or XII. The special technical feature of the Group XII invention: determining a state associated with a social media posting and providing a user interface for the social media application, having the social media posting displayed based on the state as claimed therein is not present in the invention of Groups I-XI.

Groups I- XII lack unity of invention because even though the inventions of these groups require the technical feature of visual representation of social media posting on an intelligent TV, this technical feature is not a special technical feature as it does not make a contribution over the prior art in view of US 2012/0154449 A1 (RAMAGEM et al) 21 June 2012 (21.06.2012).

US 2012/0154449 A1 to RAMAGEM et al discloses a visual whiteboard as an application or component for operation on a smart TV (para. 0007) and social networking techniques, devices, systems and software which can be used in conjunction with social networks associated with a television (para 0002) and teaches visual representation of social media posting on an intelligent TV (content identifiers or other group information can be posted to the visual whiteboard by the authorized users for subsequent display on the corresponding smart [intelligent] TV, para 0007; receiving media items from various media sources and service providers, para 0021; mechanism for direct sharing of information via the social graph ...finding a funny cat video posted on a large site like Digg, para 0038; that a content identifier (hyperlink to a video), and various notes posted to the visual whiteboard by authorized group members, para 0055; see also para 0030, 0031 for using the visual whiteboard operating on an intelligent TV and enabling an active user engaging in various aspects of social networking on the intelligent TV, including searching for updates from social networks [that implies receiving and visual representation of social postings on the intelligent TV).

Since none of the special technical features of the Group I-XII inventions are found in more than one of the inventions, unity of invention is lacking.

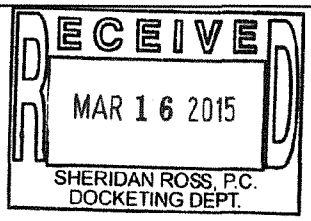
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



WILSON, Tadd, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
26 February 2015 (26.02.2015)	
Applicant's or agent's file reference: 6583-436-PCT	IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055589	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

Applicant: FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

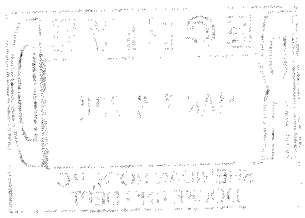
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer: Kihwan Moon

e-mail: pt01.pct@wipo.int

VIZIO Ex. 1002, Page 3222 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-436-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055589	International filing date *(day/month/year)* 19 August 2013 (19.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☒	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Tadd F. Wilson
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	19 DEC 2013
Applicant's or agent's file reference 6583-436-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55589	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 3/0 (2013.01) -
USPC - 725/46

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	26 November 2013 (26.11.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55589

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55589

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the appicable time limit:

   ☐ paid additional fees

   ☐ paid additional fees under protest and, where applicable, the protest fee

   ☐ paid additional fees under protest but the applicable protest fee was not paid

   ☒ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

   ☐ complied with

   ☒ not complied with for the following reasons:

Group I: Claims 1, 2; Group II: Claims 3, 4; Group III: Claims 5, 6; Group IV: Claims 7, 8; Group V: Claims 9, 10; Group VI: Claims 11, 12; Group VII: Claims 13, 14; Group VIII: Claims 15, 16

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fee must be paid.

Group I: Claims 1 and 2 are directed toward a method for providing video-on-demand in an intelligent television including determining metadata characteristics for a content and providing a first view of the VOD content.

Group II: Claims 3 and 4 are directed toward a method for providing video-on-demand in an intelligent television including a first, second and third selections and provide different views of the VOD content.

Group III: Claims 5 and 6 are directed toward a method for providing video-on-demand in an intelligent television including determining whether a second selection is for showcase content, movie content, television content, or variety content and provide a second user interface having content associated.

Group IV: Claims 7 and 8 are directed toward a method for providing video-on-demand in an intelligent television including receiving a first selection to filter the VOD content and providing a second collection view of the filtered content.

Group V: Claims 9 and 10 are directed toward a method for providing video-on-demand in an intelligent television including receiving a selection of a television series from the catalog view and if there is only one season, providing a first digest view of the season.

Group VI: Claims 11 and 12 are directed toward a method for providing one of two types of user interfaces in an intelligent television including receiving a second selection of an episode and playing the episode in a series player.

Group VII: Claims 13 and 14 are directed toward a method for providing video-on-demand in an intelligent television including receiving a selection to sort the items of content based on a watched status.

Group VIII: Claims 15 and 16 are directed toward a method for providing video-on-demand in an intelligent television including if the user has previously watched the content, prompting the user if the user desires to resume watching the content.

The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The common technical feature shared by Groups I-VIII are a method for providing video-on-demand in an intelligent television including sorting the contents. However, this common feature is previously disclosed by US 2006/0031875 A1 (YU). Yu discloses a method for providing video-on-demand in an intelligent television including sorting the contents (an apparatus and method for supplying electronic programs for video on demand services including sorting the received service data according to a predetermined sorting condition and display through a predetermined graphical user interface, abstract).

Since the common technical feature is previously disclosed by the Yu reference, this common feature is not special and so Groups I-VIII lack unity.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

   ☐ all parts

   ☒ the parts relating to claims Nos. 1 and 2

Form PCT/ISA/237 (Box No. IV) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55589

Box No. V. Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	NONE	YES
	Claims	1 and 2	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1 and 2	NO
Industrial applicability (IA)	Claims	1 and 2	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1 and 2 lack novelty under PCT Article 33(2) as being anticipated by US 2008/0141307 A1 (Whitehead).

As per claim 1, Whitehead discloses a method for providing video-on-demand (VOD) in an intelligent television (providing VOD in a media player 115 such as a HDTV, figure 1 and paragraphs [0012], [0016], [0022] and [0023]), the method comprising: receiving, by a processor of the intelligent television, content for VOD (receiving by the HDTV processor content of the VOD, figure 1 and paragraphs [0012], [0016], [0022] and [0023]); determining metadata characteristics for the content (determining certain content characteristics/profile of metadata such as advertising content or media content, paragraphs [0025] and [0097]); storing the metadata characteristics with the content in a database for VOD content (advertising metadata 141 is stored in an advertising database 142 and media metadata 150 is stored in a media database 156, paragraphs [0027] and [0029]); and providing a first view of the VOD content based on the metadata characteristics (providing VOD content to be viewed on the HDTV based on whether the content is media or advertisements, paragraphs [0016], [0025], [0026] and [0097]).

As per claim 2, Whitehead discloses an intelligent television system (a HDTV system, figure 1 and paragraphs [0012] and [0016]) comprising: a memory operable to store video-on-demand (VOD) content (a database for storing VOD content, paragraph [0022]); a processor in communication with the memory (a processing device 110 interact with a recording memory 112, figure 1 and paragraph [0012]), the processor operable to: execute a VOD data service (the processing device 110 can execute the VOD, paragraph [0022]) operable to: receive content for VOD (receiving content for the VOD, figure 1 and paragraphs [0012], [0016], [0022] and [0023]); determine metadata characteristics for the content (determining certain content characteristics/profile of metadata such as advertising content or media content, paragraphs [0025] and [0097]); store the metadata characteristics with the content in a database for VOD content (advertising metadata 141 is stored in an advertising database 142 and media metadata 150 is stored in a media database 156, paragraphs [0027] and [0029]); and execute a user interface application in communication with the VOD data service (a user interface (TV screen) application is implemented using the VOD content, paragraph [0088]), the user interface application operable to provide a first view of the VOD content based on the metadata characteristics (providing VOD content to be viewed on the HDTV based on whether the content is media or advertisements, paragraphs [0016], [0025], [0026] and [0097]).

Claims 1 and 2 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:

RECEIVED
MAR 16 2015
SHERIDAN ROSS, P.C.
DOCKETING DEPT.

LENNOX-GENTLE, Thaine
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-444-PCT	IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055289	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

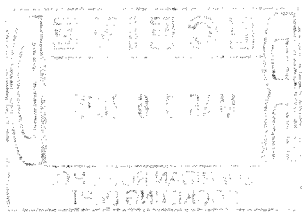
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Kihwan Moon

e-mail: pt01.pct@wipo.int

VIZIO Ex. 1002, Page 3230 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-444-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055289	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	02 DEC 2013

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-444-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055289	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2013.01)
USPC - 725/41

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	13 November 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055289

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

   ☐ on paper

   ☐ in electronic form

   b. (time)

   ☐ in the international application as filed

   ☐ together with the international application in electronic form

   ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055289

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-18 lack an inventive step under PCT Article 33(3) as being obvious over DeGonde et al. (hereinafter referred to as DeGonde) in view of Candelore.

Regarding claims 1, 13, DeGonde discloses a method (abstract), comprising receiving, by a television, a request to change a television tuner from a first channel to a second channel (user changes channel on a broadcast data receiver to switch from a first channel to a newly selected channel by using a remote control, para 55-56; see para 9, abstract), the first channel providing first programming and the second
channel providing second programming, wherein the first and second programming are different (first channel and new channel broadcast data, para 13, 55; video 16 [first channel programming] and video 26 [second channel programming], fig. 3, para 64-65) and wherein changing from the first channel to the second channel causes a delay in providing, by the television tuner, the second programming (changing from a first channel to a second channel produces a delay, para 4-5, 57; delay between first video 16 and newly selected video 26, see fig. 3, para 64-65); determining, by a microprocessor executable application framework (see application processing of system, fig. 1) and based on data associated with the at least one of the second channel and second programming, a graphical image associated with the second programming (identify and decode data for new channel, which includes I-frames, para 58-59; first I-frame decoded and displayed during transfer to new channel, para 62; video frame of newly selected channel is output for display as a still image until transfer to new channel is complete, abstract, para 14); and during the delay, displaying, by the microprocessor executable application framework and on a screen of the television, the image (video frame of newly selected channel is output for display as a still image until transfer to new channel is complete, abstract, para 14; as soon as first I-frame of new channel is received it is displayed as a still image, para 65; system is a television system, para 1). DeGonde does not specifically disclose that the data is metadata, or tangible and non-transient computer readable medium, comprising microprocessor executable instructions that, when executed, are configured to perform operations.
Candelore is in the field of a television system for displaying program information during channel changes (abstract, fig. 1) and teaches tangible and non-transient computer readable medium, comprising microprocessor executable instructions that, when executed (para 26-28), are configured to perform operations of using metadata to extract program information for display during a channel change (para 8, metadata associated with user selected program is determined, para 23, 30). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the metadata features as taught in Candelore with the invention of DeGonde in order to provide the appearance of the channels being switched more quickly to the user (see DeGonde, para 1, 14).

Regarding claim 7, DeGonde discloses a television (television system, para 1, abstract), comprising: a television tuner (tuning means, para 8-9); a screen for displaying programming (display screen, para 21); at least one of an infrared and radio frequency module (broadcast data receiver receives input from remote control via infra-red signal, para 4) configured to receive a request to change the television tuner from a first channel to a second channel (user changes channel on a broadcast data receiver to switch from a first channel to a newly selected channel by using a remote control, para 55-56; see para 9, abstract), the first channel providing first programming and the second channel providing second programming, wherein the first and second programming are different (first channel and new channel broadcast data, para 13, 55; video 16 [first channel programming] and video 26 [second channel programming], fig. 3, para 64-65) and wherein changing from the first channel to the second channel causes a delay in providing, by the television tuner, the second programming (changing from a first channel to a second channel produces a delay, para 4-5, 57; delay between first video 16 and newly selected video 26, see fig. 3, para 64-65); and a microprocessor executable application framework (see application processing of system, fig. 1) configured to determine, based on data associated with the at least one of the second channel and second programming, an image associated with the second programming (identify and decode data for new channel, which includes I-frames, para 58-59; first I-frame decoded and displayed during transfer to new channel, para 62; video frame of newly selected channel is output for display as a still image until transfer to new channel is complete, abstract, para 14) and, during the delay, display, on the screen ofthe television, the image (video frame of newly selected channel is output for display as a still image until transfer to new channel is complete, abstract, para 14; as soon as first I-frame of new channel is received it is displayed as a still image, para 65; system is a television system, para 1). DeGonde does not specifically disclose that the data is metadata. Candelore is in the field of a television system for displaying program information during channel changes (abstract, fig. 1) and teaches using metadata to extract program information for display during a channel change (para 8, metadata associated with user selected program is determined, para 23, 30). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the metadata features as taught in Candelore with the invention of DeGonde in order to provide the appearance of the channels being switched more quickly to the user (see DeGonde, para 1, 14).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055289

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claims 2, 8, 14, DeGonde discloses wherein the image is one of a captured frame of the second programming, a picture associated with the second programming, and a photograph associated with the second programming (video frame of newly selected channel is output for display as a still image until transfer to new channel is complete, abstract, para 14; as soon as first I-frame of new channel is received it is displayed as a still image, para 65; system is a television system, para 1), but does not specifically disclose wherein each ofthe first and second programming is one or more of a movie, an episode, sport event, and a television special. However, Candelore teaches wherein each ofthe first and second programming is one or more of a movie, an episode, sport event, and a television special (obtaining program information during channel changes [first channel to second channel], para 8; programming includes television programs such as movie, sporting events, news broadcasts, etc., para 29). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the programming features as taught in Candelore with the invention of DeGonde in order to allow a user of a television system to switch between desired watching experiences.

Regarding claims 3, 9, 15, DeGonde discloses wherein the image is a captured frame of the second programming and wherein the captured frame is a still image and wherein the image is displayed full screen (video frame of newly selected channel is output for display as a still image until transfer to new channel is complete, abstract, para 14; as soon as first I-frame of new channel is received it is displayed as a still image, para 65; system is a television system, para 1).

Regarding claims 4, 10, 16, DeGonde discloses wherein the image is a captured frame of the second programming and wherein the captured frame is a still and not moving image (video frame of newly selected channel is output for display as a still image until transfer to new channel is complete, abstract, para 14; as soon as first I-frame of new channel is received it is displayed as a still image, para 65; system is a television system, para 1), but fails to disclose wherein the image is displayed as part of a header bar, and wherein the header bar comprises at least one of a program name, series name, episode number, episode name, and sport event name and a plurality of a program description, a program type, a program category, a start-to-finish time, current runtime, and a remaining runtime.
However, Candelore teaches wherein the metadata is displayed as part of a header bar, and wherein the header bar comprises at least one of a program name, series name, episode number, episode name, and sport event name and a plurality of a program description, a program type, a program category, a start-to-finish time, current runtime, and a remaining runtime (during channel change event, metadata provides information about the selected program channel and displays it to the user, which includes program description and name, see Fig. 5, 7, para 73-74). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the header bar information features as taught in Candelore with the invention of DeGonde in order to provide the user with useful information related to the selected programming during a channel change (see Candelore, para 20, 73-74).

Regarding claims 5, 11, 17, DeGonde discloses wherein the image is a captured frame of the second programming and is not moving (video frame of newly selected channel is output for display as a still image until transfer to new channel is complete, abstract, para 14; as soon as first I-frame of new channel is received it is displayed as a still image, para 65; system is a television system, para 1).

Regarding claims 6, 12, 18, DeGonde discloses the invention above, including the image, but fails to disclose wherein the metadata and image are provided by an electronic program guide service. However, Candelore teaches obtaining metadata and information provided by an electronic program guide service (electronic program guide (EPG) provides metadata information, para 29-30; see para 66, 68). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the electronic program guide features as taught in Candelore with the invention of DeGonde in order to use information provided by the service provider (see Candelore, para 68).

Claims 19-20 lack an inventive step under PCT Article 33(3) as being obvious over DeGonde in view of Candelore and further in view of Michel et al. (hereinafter referred to as Michel).

Regarding claims 19-20, DeGonde as modified discloses the invention above, but fails to disclose wherein the metadata is populated into an electronic program guide using the Program and System Information Protocol or wherein the metadata is converted into a broadcast-ready format by a Programming Metadata Communication Protocol generator. However, the use of Program and System Information Protocol and Programming Metadata Communication Protocol was well known in the art at the time of the invention, as evidenced by Michel. Michel is in the field of transmitting program information over television networks (abstract) and teaches using wherein the metadata is populated into an electronic program guide using the Program and System Information Protocol (program data server configured to provide current programsystem information protocol (PSIP) data, para 6; inserted into EPG, para 19, 25) and wherein the metadata is converted into a broadcast-ready format by a Programming Metadata Communication Protocol generator (data formatter 320 then formats the PSIP data into a format referred to as Programming and Metadata Communication Protocol (PMCP), which can be interpreted by the station PSIP generator 134, para 28, fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the metadata protocols as taught in Michel with the invention of modified DeGonde in order to abide by current mandated laws (see Michel, para 3).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

RECEIVED
MAR 16 2015
SHERIDAN ROSS, P.C.
DOCKETING DEPT.

To:

LENNOX-GENTLE, Thaine
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
26 February 2015 (26.02.2015)	
Applicant's or agent's file reference	IMPORTANT NOTICE
6583-445-PCT	

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055288	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP , LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

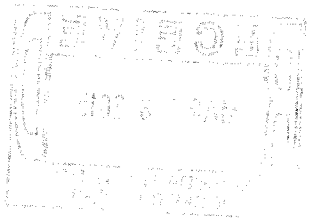
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Philippe Bécamel

e-mail: pt03.pct@wipo.int

VIZIO Ex. 1002, Page 3238 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-445-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055288	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP , LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☒	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	02DEC 2013
Applicant's or agent's file reference 6583-445-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055288	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/173 (2013.01)
USPC - 725/27

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [X] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	11 November 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055288

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055288

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-20 lack an inventive step under PCT Article 33(3) as being obvious over Yu et al., hereinafter referred to as Yu in view of Hill et al., hereinafter referred to as Hill.

Regarding claims 1, 7, 13, Yu discloses a method [claim 1] (a method for providing content, abstract), a television, comprising: a television screen [claim 7] (a user platform 140 comprises a television 142 [includes television screen], figs.2 & 7 para 0071): a tangible and non-transient computer readable medium, comprising microprocessor executable instructions that, when executed, are configured to perform operations comprising [claim 13] (a non-transitory machine readable medium 5622 which stores instructions, further a memory 5606 and processor 5602 executes the instructions and transmitted over the network, para 0229): comprising: receiving, wirelessly by at least one of an infrared and radio frequency module of a television and from a remote control, a request to change a programming channel (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user access television content items via a TV portal, the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired TV content item [it is inherent for a conventional television remote control device to include an infrared module and as the TV receives the selection via the infrared the television also includes an infrared module], para 0115, 0122);
displaying, by a microprocessor executable application framework and on a television screen, an on screen channel changer, the on screen channel changer comprising electronic program guide ("EPG") information (fig. 18 displays a content listing area 1820 [screen channel changer/ electronic program guide] which lists the available contents with the time slots which includes the programming channels, which the users can highlights/select a particular content using an input device which upon selection delivers the content, para 0119, 0123; further fig. 20 displays a TV portal 2012 which displays a listing of television content which can be accessed by the user, and displays an electronic/interactive programing guide (EPG) on a user selection platform 140, and further the user selects the listed TV content by position the selection box 2022 using the remote control device, para 0086, 0122; fig.56 shows a processor 5602 that is a central processing unit which executes instructions to provide display at the display unit 5610, para 0228),
receiving, by the application framework and from the remote control, a channel selection using the on screen channel changer (fig. 18 displays a content listing area 1820 [screen channel changer/ application framework] which lists the available contents with the time slots which includes the programming channels, which the users can highlights/select a particular content using an input device which upon selection [receiving a channel selection] delivers the content, para 0119, 0123; further fig. 20 displays a TV portal 2012 which displays a listing of television content which can be accessed by the user, and displays an electronic/interactive programing guide (EPG) on a user selection platform 140, and further the user selects the particular listed TV content by position the selection box 2022 [receiving a channel selection using the remote control] using the remote control device, para 0086, 0122);
and changing, by the application framework, to the selected channel (further fig. 20 displays a TV portal 2012 wherein the user selects the particular listed TV content by position the selection box 2022 using the remote control device and upon the selection of 2022 the user is presented with fig.21 wherein the display 2100 provides the user with an option to select 2122 upon the selection of that button the user is enable to watch the content [interpreted as changing to the selected channel], para 0086, 0122), but lacks the teaching of the on screen channel changer comprising a number input bar comprising digits; receiving a channel selection based on digits using the on screen channel changer.
Hill is in the field of a TV display 28 which displays a soft number pad used to receive inputs for channel selection (see para 0119) and teaches displaying the on screen channel changer comprising electronic program guide ("EPG") information and a number input bar comprising digits (fig.1 shows a TV display 28 and a broadcast EPG is displayed on the display 28, para 0014; figs. 2 & 7 shows an image button 62 which can be selected by the user to display an electronic programing guide to be presented on the display 28, further the display 28 displays a soft number pad 310 which allows the viewer to select any number from zero to nine to input to select/tune to a specific channel number, para 0019) receiving a channel selection based on digits using the on screen channel changer (fig.1 shows a TV display 28 and a broadcast EPG is displayed on the display 28, para 0014; figs. 2 & 7 shows an image button 62 which can be selected by the user to display an electronic programing guide to be presented on the display 28, further the display 28 displays a soft number pad 310 which allows the viewer to select any number from zero to nine to input [receiving a channel selection] to select/tune to a specific channel number, para 0019). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Hill to incorporate the on screen channel changer comprising a number input bar comprising digits; receiving a channel selection based on digits using the on screen channel changer into the invention of Yu. The motivation would have been to provide a touch interface for an optimized user experience (see para 0004).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055288

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 7-19 is objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because Claim 1 is indefinite for the following reasons:

Claim 7 seems to incorrectly combine two separate claims, and recites "A television, comprising: a television screen..... and change to the selected channel. The television of claim 7, wherein the digits range from 0 to 9." Further, claims 8-9 depend from themselves. For the purpose of the written opinion, claims 7-19 are interpreted as including an extra claim, to provide a total of 20 claims, and to recite the following:

7. A television, comprising: a television screen; at least one of an infrared and radio frequency module configured to receive wirelessly requests from a remote control of a user, the requests comprising a selected channel or program from a displayed listing; and microprocessor executable application framework configured to receive a request to change a programming channel, display, on the television screen, an on screen channel changer, the on screen channel changer comprising electronic program guide ("EPG") information and a number input bar comprising digits, receive, from the remote control, a channel selection based on digits using the on screen channel changer, and change to the selected channel.

8. The television of claim 7, wherein the digits range from 0 to 9, wherein the remote control selects the digits using non-numeric keys, and wherein the EPG information corresponds to multiple programs and/or channels, and wherein the EPG information comprises, for each program, airtime, program name, program channel, and program description.

9. The television of claim 8, wherein each of the digits are selected using one or more arrow keys and a select button.

10. The television of claim 9, wherein the remote control does not have a key corresponding to each of the digits.

11. The television of claim 7, wherein the on screen channel changer comprises a thumbnail preview containing EPG information corresponding to an in focus channel and/or program and a graphical image, wherein the EPG information in the thumbnail preview comprises, for the in focus channel and/or program, airtime, program name, program channel, and program description, and wherein the graphical image in the thumbnail preview is one of a captured frame of a program associated with the in focus program, a picture associated with the in focus program, and a photograph associated with the in focus program.

12. The television of claim 7, wherein, as the user selects each digit, the application framework updates the EPG information to include only those programs and/or channels selectable from the selected digits.

13. A tangible and non-transient computer readable medium, comprising microprocessor executable instructions that, when executed, are configured to perform operations comprising: receive, from a remote control of a user, a request to change a programming channel; display, on a television screen, an on screen channel changer, the on screen channel changer comprising electronic program guide ("EPG") information and a number input bar comprising digits; receive, from the remote control, a channel selection based on digits using the on screen channel changer; and change to the selected channel.

14. The computer readable medium of claim 13, wherein the digits range from 0 to 9, wherein the remote control selects the digits using non-numeric keys, and wherein the EPG information corresponds to multiple programs and/or channels, and wherein the EPG information comprises, for each program, airtime, program name, program channel, and program description.

15. The computer readable medium of claim 14, wherein each of the digits are selected using one or more arrow keys and a select button.

16. The computer readable medium of claim 15, wherein the remote control does not have a key corresponding to each of the digits.

17. The computer readable medium of claim 13, wherein the on screen channel changer comprises a thumbnail preview containing EPG information corresponding to an in focus channel and/or program and a graphical image, wherein the EPG information in the thumbnail preview comprises, for the in focus channel and/or program, airtime, program name, program channel, and program description, and wherein the graphical image in the thumbnail preview is one of a captured frame of a program associated with the in focus program, a picture associated with the in focus program, and a photograph associated with the in focus program.

18. The computer readable medium of claim 13, wherein, as the user selects each digit, the application framework updates the EPG information to include only those programs and/or channels selectable from the selected digits.

19. The method of claim 5, wherein the EPG information and graphical image in the thumbnail preview changes as the in focus EPG information changes.

20. The television of claim 11, wherein the EPG information and graphical image in the thumbnail preview changes as the in focus EPG information changes.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055288

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claims 2, 8, 14, Yu further teaches wherein the remote control selects keys (the user selects any of the listed TV content by activating a selection button on the remote control device, para 0122) and wherein the EPG information corresponds to multiple programs and/or channels (fig. 18 displays a content listing area 1820 [electronic program guide includes multiple programs and/or channels] which lists the available contents with the time slots which includes the programming channels, which the users can highlights/select a particular content using an input device which upon selection delivers the content, para 0119, 0123), and wherein the EPG information comprises, for each program, airtime, program name, program channel, and program description (fig. 18 displays a content listing area 1820 [electronic program guide includes multiple programs and/or channels] which lists the available contents with the time slots [airtime] which includes the programming channels, which the users can highlights/select a particular content 1822 "Lost" [includes the program name] 1812 displays the program channel "abc" and further 1824 [program description] provides detailed information of the selected content listing, para 0119, 0123), but lacks the teaching of wherein the digits range from 0 to 9, wherein the remote control selects the digits using non-numeric keys. Furthermore, to establish the selected key on the remote control to be a non-numeric key would have been a matter of design choice and would have been a known practice in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine wherein the remote control selects using non-numeric keys as taught by Yu. The motivation would have been to provide users with an optimized experience for accessing the program contents.
Hill is in the field of a TV display 28 which displays a soft number pad used to receive inputs for channel selection (see para 0119) and teaches selects the digits on a display and wherein the digits range from 0 to 9 (fig.1 shows a TV display 28 and a broadcast EPG is displayed on the display 28, para 0014; figs. 2 & 7 shows an image button 62 which can be selected by the user to display an electronic programing guide to be presented on the display 28, further the display 28 displays a soft number pad 310 which allows the viewer to select any number from zero to nine to input to select/tune to a specific channel number, para 0019). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Hill to incorporate wherein the digits range from 0 to 9, wherein the remote control selects the digits using non-numeric keys into the invention of Yu. The motivation would have been to provide a touch interface for an optimized user experience (see para 0004).

Regarding claims 3, 9, 15, Yu further teaches wherein each of the digits are selected using one or more arrow keys and a select button (figs.34 & 35 shows a user is presented with an alphanumeric tool 3410, 3510 which the user uses to type in a search query "12 Monkeys" 3422 [each of the digits are selected] using the remote control device, para 0140; a user using the conventional television remote control device using a keyboard arrow buttons to select the options on the display, para 0115; the user selects any of the listed TV content by activating a selection button on the remote control device, para 0122).

Regarding claims 4, 10, 16, Yu further teaches wherein the remote control does not have a key corresponding to each of the digits (figs.34 & 35 shows a user is presented with an alphanumeric tool 3410, 3510 which the user uses to type in a search query "12 Monkeys" 3422 [each of the digits are selected] using the remote control device, para 0140; a user using the conventional television remote control device using a keyboard arrow buttons to select the options on the display [as arrow keys are used on the remote control device it is interpreted as remote control does not have a key corresponding to each of the digits], para 0115).

Regarding claims 5, 11, 17, Yu further teaches wherein the on screen channel changer comprises
a thumbnail preview containing EPG information corresponding to an in focus channel and/or program and a graphical image, wherein the EPG information in the thumbnail preview comprises, for the in focus channel and/or program, airtime, program name, program channel, and program description (fig. 18 displays a content listing area 1820 [electronic program guide includes multiple programs and/or channels] which lists the available contents with the time slots [airtime] which includes the programming channels, which the users can highlights/select a particular content 1822 "Lost" [includes the program name] 1812 displays the program channel "abc" and further 1824 [program description] provides a thumbnail preview [graphical image] and 1826 provides detailed information of the selected content listing, para 0119, 0123), and wherein the graphical image in the thumbnail preview is one of a captured frame of a program associated with the in focus program, a picture associated with the in focus program, and a photograph associated with the in focus program (1824 shows a graphical image is a photograph related to the programming channel selected by the user, para 0123).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055288

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claims 6, 12, 18, Yu further teaches wherein, the application framework updates the EPG information to include only those programs and/or channels selectable (fig. 20 displays a TV portal 2012 which displays a listing of television content which can be accessed by the user, and displays an electronic/interactive programing guide (EPG) on a user selection platform 140, and further the user selects the listed TV content by position the selection box 2022 using the remote control device and upon the selection of 2022 the user is presented with fig.21 wherein the display 2100 provides the user with an option to select 2122 upon the selection of that button the user is enable to watch the content [upon the selection of 2022 to provide the display screen 2100 is interpreted as updates the EPG information], para 0086, 0122), but lacks the teaching of wherein, as the user selects each digit, the application framework updates the EPG information to include only those programs and/or channels selectable from the selected digits
Hill is in the field of a TV display 28 which displays a soft number pad used to receive inputs for channel selection (see para 0119) and teaches as the user selects each digit and the programs and/or channels selectable from the selected digits (fig.1 shows a TV display 28 and a broadcast EPG is displayed on the display 28, para 0014; figs. 2 & 7 shows an image button 62 which can be selected by the user to display an electronic programing guide to be presented on the display 28, further the display 28 displays a soft number pad 310 which allows the viewer to select any number from zero to nine to input to select/tune to a specific channel number, para 0019). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Hill to incorporate wherein, as the user selects each digit, the application framework updates the EPG information to include only those programs and/or channels selectable from the selected digits into the invention of Yu. The motivation would have been to provide a touch interface for an optimized user experience (see para 0004).

Regarding claim 19, Yu further teaches wherein the EPG information and graphical image in the thumbnail preview changes as the in focus EPG information changes (fig.18 shows an EPG with 1824 [graphical image] and further when the pointing device is moved in proximity to a particular content item listing in content listing area 1820, the particular content item listing is highlighted and the content information associated with the highlighted content item listing is displayed in an expanded form [as the user selects different contents each contents image is displayed interpreted as thumbnail preview changes as the in focus] of the highlighted content item listing as shown in FIG. 18, para 0119).

Regarding claim 20, Yu further teaches, wherein the EPG information and graphical image in the thumbnail preview changes as the in focus EPG information changes (fig.18 shows an EPG with 1824 [graphical image] and further when the pointing device is moved in proximity to a particular content item listing in content listing area 1820, the particular content item listing is highlighted and the content information associated with the highlighted content item listing is displayed in an expanded form [as the user selects different contents each contents image is displayed interpreted as thumbnail preview changes as the in focus] of the highlighted content item listing as shown in FIG. 18, para 0119).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:

RECEIVED
MAR 16 2015
SHERIDAN ROSS, P.C.
DOCKETING DEPT.

LENNOX-GENTLE, Thaine
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-446-PCT	**IMPORTANT NOTICE**
International application No. PCT/US2013/055286	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)
Priority date *(day/month/year)* 17 August 2012 (17.08.2012)	
Applicant FLEXTRONICS AP, LLC.	

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

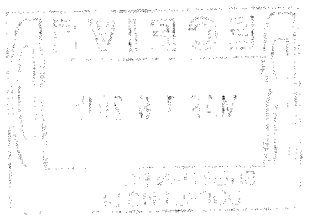
Facsimile No. +41 22 338 82 70

Authorized officer

Philippe Bécamel

e-mail: pt03.pct@wipo.int

VIZIO Ex. 1002, Page 3248 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-446-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055286	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	02 DEC 2013
Applicant's or agent's file reference 6583-446-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055286	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2013.01)
USPC - 725/41

Applicant FLEXTRONICS AP, LLC.

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	15 November 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055286

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055286

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-21	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-21 lack an inventive step under PCT Article 33(3) as being obvious over Yi in view of Constant et al. (hereinafter referred to as Constant).

Regarding claims 1, 15, Yi discloses a method (para 6), and a tangible and non-transient computer readable medium, comprising microprocessor executable instructions that, when executed, are configured to perform operations (para 7, 14) comprising: receiving, by a television (television 12, Fig. 1), electronic program guide ("EPG") information associated with a channel and/or program (EPG, Fig. 2, is displayed on TV Display, para 5, 17); determining, by a microprocessor executable application framework (processor 14 of TV, para 14) and based on metadata associated with a selected program (metadata associated with selected channel is accessed, para 23, 6), a graphical image associated with the selected program (second metadata may also include information pertaining to a program different than a current program on the TV channel as well as a video preview of the TV channel, para 5; metadata information can include thumbnail image of channel, para 23); and in a first mode, displaying, by the application framework and on a screen of the television, a thumbnail preview comprising EPG information associated with the selected program and the graphical image, wherein the selected program corresponds to an in focus program in a listing of EPG information for multiple channels and/or programs and wherein the graphical image is not related with a currently viewed program (when browsing the channels a desired [i.e. not currently viewed] channel icon can be selected so that enhanced metadata is accessed from EPG data structure and presented to the user, which includes a still image miniature of the program, para 23-25, Fig. 4); and in a second mode, displaying, by the application framework and on the television screen, a header bar (cross media bar XMB, para 6), the header bar comprising EPG information associated with the selected program and the graphical image (XMB bar displays EPG metadata associated with the desired [selected] program, para 23-25, fig.3-4), but does not specifically disclose wherein the selected program corresponds to a currently viewed program and is not related to an in focus program in a listing of EPG information for multiple channels and/or programs.
However, in the field of displaying EPG information on a television display (abstract, Fig. 1a), Constant teaches receiving, by a television (television, para 12), electronic program guide ("EPG") information associated with a channel and/or program (providing an electronic program guide to a television, abstract, para 12); in a first mode, displaying a thumbnail preview comprising EPG information associated with the selected program and the graphical image (see Fig. 1a-b; image preview of a show is shown in top banner 110, para 20-21); and in a second mode, displaying, by the application framework and on the television screen, a header bar (fig. 2a-b [showing second mode], window displays a TV Viewing Now & Next banner 230, para 32-34), the header bar comprising EPG information associated with the selected program and the graphical image (image shown in 210 may depend on selected channel, para 34-35), wherein the selected program corresponds to a currently viewed program and is not related to an in focus program in a listing of EPG information for multiple channels and/or programs (banner 230 provides information on the current TV channel, para 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the header bar showing the currently viewed program information as taught in Constant with the invention of Yi in order to provide the viewer with information that corresponds to the current time and channel viewed (see Constant, para 34).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055286

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 8, Yi discloses a television (television 10, para 14, fig. 1), comprising: a screen for displaying programming (TV display 40, para 5, 17, Fig. 1); at least one of an infrared and radio frequency module configured to receive wireless signals from a remote control of a user (TV system 10 also includes a portable hand-holdable TV remote control (RC) 22. The RC 22, among other things, can have cursor control keys 24 for sending wireless signals to a receiver 26 on the chassis 12, para 15, fig. 1); and a microprocessor executable application framework (processor 14 of TV, para 14) configured to receive electronic program guide ("EPG") information associated with a channel and/or program (EPG, Fig. 2, is displayed on TV Display, para 5, 17), determine, based on metadata associated with a selected program(metadata associated with selected channel is accessed, para 23, 6), a graphical image associated with the selected program (second metadata may also include information pertaining to a program different than a current program on the TV channel as well as a video preview of the TV channel, para 5; metadata information can include thumbnail image of channel, para 23); and operate in the following modes: in a first mode, displaying, on the television screen, a thumbnail preview comprising EPG information associated with the selected program and the graphical image, wherein the selected program corresponds to an in focus program in a listing of EPG information for multiple channels and/or programs and wherein the graphical image is not related with a currently viewed program (when browsing the channels a desired [i.e. not currently viewed] channel icon can be selected so that enhanced metadata is accessed from EPG data structure and presented to the user, which includes a still image miniature of the program, para 23-25, Fig. 4); and in a second mode, displaying, on the television screen, a header bar (cross media bar XMB, para 6), the header bar comprising EPG information associated with the selected program and the graphical image (XMB bar displays EPG metadata associated with the desired [selected] program, para 23-25, fig.3-4), but does not specifically disclose wherein the selected program corresponds to a currently viewed program and is not related to an in focus program in a listing of EPG information for multiple channels and/or programs. However, in the field of displaying EPG information on a television display (abstract, Fig. 1a), Constant teaches receiving, by a television (television, para 12), electronic program guide ("EPG") information associated with a channel and/or program (providing an electronic program guide to a television, abstract, para 12); in a first mode, displaying a thumbnail preview comprising EPG information associated with the selected program and the graphical image (see Fig. 1a-b; image preview of a show is shown in top banner 110, para 20-21); and in a second mode, displaying, by the application framework and on the television screen, a header bar (fig. 2a-b [showing second mode], window displays a TV Viewing Now & Next banner 230, para 32-34), the header bar comprising EPG information associated with the selected program and the graphical image (image shown in 210 may depend on selected channel, para 34-35), wherein the selected program corresponds to a currently viewed program and is not related to an in focus program in a listing of EPG information for multiple channels and/or programs (banner 230 provides information on the current TV channel, para 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the header bar showing the currently viewed program information as taught in Constant with the invention of Yi in order to provide the viewer with information that corresponds to the current time and channel viewed (see Constant, para 34).

Regarding claims 2, 9, 16, Yi discloses wherein the first mode is performed when the user changes a channel to the selected program (when browsing the channels a desired channel icon can be selected [i.e. user changed channel] so that enhanced metadata is accessed from EPG data structure and presented to the user, which includes a still image miniature of the program, para 23-25, Fig. 4) and/or when the user moves a remote control (enhanced metadata is displayed when the desired channel icon is activated by user for more than a first period, para 4-5, wherein the user uses a remote control to select desired channels, para 17).

Regarding claims 3, 10, 17, Yi as modified discloses the invention above, and Yi further discloses wherein the second mode is performed when the listing EPG information is displayed on the television screen (EPG, Fig. 2, is displayed on TV Display, para 5, 17) and wherein the EPG information comprises, for each program, program name, program channel, and program description (program name 70 and other enhanced metadata information, including program description and channel, para 21, 23, fig. 3-4), but does not specifically disclose the EPG information includes, for each program, airtime. However, Constant teaches wherein the second mode is performed when the listing EPG information is displayed on the television screen (see fig. 2a; EPG shown on TV display, para 11-12) and wherein the EPG information comprises, for each program, airtime, program name, program channel (Fig. 1a-b shows the EPG information includes the time 122, name and channel 121, para 21). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the second mode features as taught in Constant with the invention of Yi in order to provide the viewer with information that corresponds to the current time and channel viewed (see Constant, para 34).

Regarding claims 4, 11, 18, Yi discloses wherein the selected program is one or more of a movie, an episode, sport event, and a television special (selected program may be an episode, para 23, fig. 4) and wherein the image is one of a captured frame of the selected program, a picture associated with the selected program, and a photograph associated with the selected program (desired channel icon can be selected so that enhanced metadata is accessed from EPG data structure and presented to the user, which includes a still image miniature of the program, para 23-25, Fig. 4).

Regarding claims 5, 12, 19, Yi discloses wherein the image is a captured frame, wherein the captured frame is a still image and wherein the image is displayed only on part of the screen (desired channel icon can be selected so that enhanced metadata is accessed from EPG data structure and presented to the user, which includes a still image miniature of the program, para 23-25, see Fig. 4 [showing enhanced metadata shown on part of display 50]).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055286

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding claims 6, 13, 20, Yi discloses wherein the image is a captured frame, wherein the captured frame is a still and not moving image (desired channel icon can be selected so that enhanced metadata is accessed from EPG data structure and presented to the user, which includes a still image miniature of the program, para 23-25, see Fig. 4), and wherein the header bar comprises at least one of a program name, series name, episode number, episode name, and sport event name and a plurality of a program description, a program type, a program category, a start to-finish time, current runtime, and a remaining runtime (XMB header bar displays program name 70 and other enhanced metadata information, including program description, para 21, 23, fig. 3-4).

Regarding claims 7, 14, 21, Yi discloses wherein the metadata and image are provided by an electronic program guide service (desired channel icon can be selected so that enhanced metadata is accessed from EPG data structure and presented to the user, which includes a still image miniature of the program, para 23-25, see Fig. 4).

Claims 1-21 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

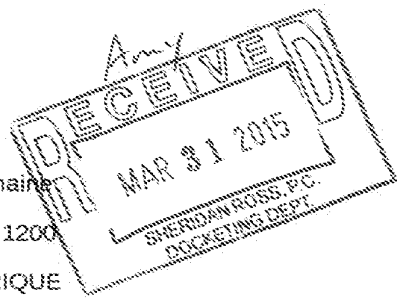
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



LENNOX-GENTLE, Thaine
Sheridan Ross P.C.
1560 Broadway Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*
26 February 2015 (26.02.2015)

Applicant's or agent's file reference
6583-448-PCT

IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055284	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Philippe Bécamel

e-mail: pt03.pct@wipo.int

VIZIO Ex. 1002, Page 3256 of 3573
VIZIO v. MMT, IPR2024-00722

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-448-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055284	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☒	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☒	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)* 14 JAN 2014

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-448-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055284	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2014.01)
USPC - 725/41

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	02 January 2014	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055284

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the applicable time limit:

   ☐ paid additional fees

   ☐ paid additional fees under protest and, where applicable, the protest fee

   ☐ paid additional fees under protest but the applicable protest fee was not paid

   ☒ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

   ☐ complied with

   ☒ not complied with for the following reasons:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claims 1-24, drawn to a method of maintaining and displaying a set of favorite channels and programs.
Group II, claims 25-28, drawn to a method of monitoring viewing patterns of a user.

The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention: receiving EPG information, maintaining a set of favorite channels and programs, displaying a list, receiving a selection and changing the channel to the selection as claimed therein is not present in the invention of Group II. The special technical feature of the Group II invention: monitoring viewing patterns of a user and determining the more frequently viewed channels of greater interest to the user than less frequently viewed channels as claimed therein is not present in the invention of Groups I.

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of a microprocessor executable application related to television programming, this technical feature is not a special technical feature as it does not make a contribution over the prior art in view of US 2003/0177498 A1 (ELLIS et al) 18 September 2003 (18.09.2003), abstract, para 36, 93, 95.

Since none of the special technical features of the Group I or II inventions are found in more than one of the inventions, unity of invention is lacking.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

   ☐ all parts

   ☒ the parts relating to claims Nos. 1-24

VIZIO Ex. 1002, Page 3260 of 3573
VIZIO v. MMT, IPR2024-00722

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055284

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	3, 7-8, 11, 15-16, 19, 23, 24	YES
	Claims	1-2, 4-6, 9-10, 12-14, 17-18, 20-22	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-24	NO
Industrial applicability (IA)	Claims	1-24	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-2, 4-6, 9-10, 12-14, 17-18, 20-22 lack novelty under PCT Article 33(2) as being anticipated by Yu et al., hereinafter referred to as Yu.

Regarding claims 1, 17, Yu discloses a method and tangible and non-transient computer readable medium, comprising microprocessor executable instructions (abstract, para 44, Fig. 56), comprising: receiving, by a microprocessor executable data service of a television and from a network accessible content provider (see Fig. 2, showing service provider sending content to a television), electronic program guide ("EPG") information (content includes providing an EPG, para 86, see fig. 18), the EPG information comprising, for each program, airtime, program name, program channel, and program description (see Fig. 18 showing for each program, a schedule time [airtime as shown in top bar], program name, channel and description, para 123); maintaining, by the data service in a local computer readable medium (guide generator 366 is part of user platform 140 and stores guide information locally, see Fig. 10 & 13, para 86; local storage, para 87, 89, Fig. 9), a set of favorite channels and programs (content listing grouping represented by the 'Favorites' command option in command option area 1810, para 120, Fig. 18); receiving, by a microprocessor executable application framework (Fig. 13) and from a remote control of a user (user can manipulate a conventional television remote control device, cursor control device, keyboard arrow buttons, or other pointing and/or control mechanism to select one of the command options, para 115), a request for channels and programs marked as favorites (The 'Favorites' command option enables the user to pick content from a group of pre-defined user favorites, para 120, Fig. 18); displaying, by the application framework and on a television screen, a listing of the set of favorite channels and programs, the listing comprising EPG information (user favorites can be content items explicitly specified by the user as favorite content items by using command options provided by the 'Favorites' functionality, para 119-120, see Fig. 18); receiving, by the application framework and from the remote control, a selected channel or program from the listing (user selects content from the favorites listing, para 120, Fig. 18); and changing, by the application framework, to the selected channel (the favorites content items provide the user with easy access to the channel for content viewing [i.e. the channel is changed to the favorite], para 124).

Regarding claim 9, Yu discloses a television (Fig. 2, abstract), comprising: a television screen (television provides user with display of information, Fig. 2, para 121); a local computer readable medium (Fig. 56, para 228); at least one of an infrared and radio frequency module configured to receive wirelessly requests from a remote control of a user (remote control device may be wireless, para 115), the requests comprising a selected channel or program from a displayed listing (select desired command option, para 115; user selects content from the favorites listing, para 120, Fig. 18); a microprocessor executable data service configured to receive from a network accessible content provider (see Fig. 2, showing service provider sending content to a television), electronic program guide ("EPG") information (content includes providing an EPG, para 86, see fig. 18), the EPG information comprising, for each program, airtime, program name, program channel, and program description (see Fig. 18 showing for each program, a schedule time [airtime as shown in top bar], program name, channel and description, para 123) and to maintain, in the local computer readable medium (guide generator 366 is part of user platform 140 and stores guide information locally, see Fig. 10 & 13, para 86; local storage, para 87, 89, Fig. 9), a set of favorite channels and programs (content listing grouping represented by the 'Favorites' command option in command option area 1810, para 120, Fig. 18); and a microprocessor executable application framework (Fig. 13) configured to receive from a remote control of a user (user can manipulate a conventional television remote control device, cursor control device, keyboard arrow buttons, or other pointing and/or control mechanism to select one of the command options, para 115), a request for channels and programs marked as favorites (The 'Favorites' command option enables the user to pick content from a group of pre-defined user favorites, para 120, Fig. 18) to display, on the television screen, a listing of the set of favorite channels and programs, the listing comprising EPG information (user favorites can be content items explicitly specified by the user as favorite content items by using command options provided by the 'Favorites' functionality, para 119-120, see Fig. 18), to receive, from the at least one of an infrared and radio frequency module, a selected channel or program from the listing (user selects content from the favorites listing, para 120, Fig. 18), and change to the selected channel (the favorites content items provide the user with easy access to the channel for content viewing [i.e. the channel is changed to the favorite], para 124).

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 5, 13, 21 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because they are indefinite for the following reason:

Claims 5, 13, 21 cite dependency from claims 4, 12, 20, respectively. However, claims 4, 12, 20 lack antecedent basis for "the second programming" recited. For the purpose of the written opinion, Claims 5, 13, 21 are interpreted as reciting "a second programming."

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055284

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding claims 2, 10, 18, Yu discloses wherein the programs described by the EPG programming information are indexed by airtime, channel, category, and favorites (see EPG data shown in Fig. 18, showing each program with its scheduled time [top bar], channel [10-16], and 1610 showing categories and favorites, para 119-120) and wherein the set of favorite channels and programs are not maintained in a remotely located computer readable medium (guide generator 366 is part of user platform 140 and stores guide information, including favorites listings, locally, see Fig. 10 & 13, para 86; local storage, para 87, 89, Fig. 9).

Regarding claims 4, 12, 20, Yu discloses wherein, in the displaying step, the screen comprises a header bar, the header bar comprising a graphical image associated with an infocus program EPG information (see Fig. 18, showing header bar with an infocus program information for listing "Lost", para 122-123).

Regarding claims 5, 13, 21, Yu discloses wherein the header bar comprises at least one of a program name, series name, episode number, episode name, and sport event name (see Fig. 18, showing header bar with program name "Lost", para 122) and a plurality of a program description, a program type, a program category, a start-to-finish time, current runtime, and a remaining runtime (see Fig. 18, showing program description for "Lost", para 122) and wherein the image is one of a captured frame of the second programming, a picture, and a photograph (see picture depicting program "Lost", Fig. 18, para 122).

Regarding claims 6, 14, 22, Yu discloses wherein the image is a captured frame of the second programming and wherein the captured frame is a still image and the image is displayed on only a part of the screen (see Fig. 18 showing still image of TV show "Lost" on only part of the screen, para 122).

Claims 1, 17 lack novelty under PCT Article 33(2) as being anticipated by Lee et al., hereinafter referred to as Lee.

Regarding claims 1, 17, Lee discloses a method and tangible and non-transient computer readable medium, comprising microprocessor executable instructions (abstract, Fig. 19, para 489), comprising receiving, by a microprocessor executable data service of a television (image display apparatus 100 includes processor and application, Fig. 2, para 57-59) and from a network accessible content provider (content provider 10 and HNED 40 comprising a smart TV, Fig. 1, para 46-49; see Fig. 14), electronic program guide ("EPG") information (para 214, Fig. 4), the EPG information comprising, for each program, airtime, program name, program channel, and program description (EPG data includes broadcasting information specifying start times, end times [airtime] of scheduled TV programs, para 222; see object 2021 showing broadcast information including channel, program name and airtime, Fig. 49); maintaining, by the data service in a local computer readable medium, a set of favorite channels and programs (memory 140 stores applications, para 104, 126-132; applications include favorite channel object representing favorite channels, para 299, 330); receiving, by a microprocessor executable application framework (Fig. 12) and from a remote control of a user (Fig. 13), a request for channels and programs marked as favorites (favorite channel object selected? S1920, Fig. 19; user selects favorite channel object 2019 using remote controller 200, para 380); displaying, by the application framework and on a television screen (Fig. 12, 15), a listing of the set of favorite channels and programs, the listing comprising EPG information (display favorite channel list S1925, Fig. 19; favorite channel list 2110 is displayed, para 381); receiving, by the application framework and from the remote control, a selected channel or program from the listing (display broadcast image of selected channel, S1935, Fig. 19; specific channel from favorite listing is selected by user, para 380-383); and changing, by the application framework, to the selected channel (Fig. 19; channel is switched to selected channel from favorites listing, para 380-383).

Claims 3, 7, 11, 15, 19, 23 lack an inventive step under PCT Article 33(3) as being obvious over Yu in view of Schein et al., hereinafter referred to as Schein.

Regarding claims 3, 11, 19, Yu discloses the invention above, and further discloses wherein locally stored EPG information comprises a category indicator to indicate a category of the corresponding program (see Fig. 18, showing category of selected program "Lost" as being TVPG [TV category], para 123), and a first air indicator to indicate that a corresponding program that is airing for the first time (see Fig. 18, showing icon caption of "repeat" in the program content listing for "Lost" [indicating this is a repeat, and not a first aired program listing], para 123) and wherein the program is one or more of a movie, an episode, sport event, and a television special (see Fig. 18, showing program episode "Lost", para 123-124). Yu lacks teaching a favorite indicator to indicate that a corresponding channel or program is in the set of favorite channels and programs, a reminder indicator to indicate that a corresponding program has been set to trigger a reminder. Schein is in the field of television program schedule listings (abstract, para 56) and teaches the EPG information (program guide, para 56) comprises a favorite indicator to indicate that a corresponding channel or program is in the set of favorite channels and programs (viewer than identifies which ones are favorites. After specifying the criteria for being a favorite, a confirmation panel (not shown) may appear that allows the viewer to o.k. the action. When the viewer returns to the Items Info Menu, a favorite symbol has been added to the title, para 56, Fig. 9A-F), and a reminder indicator to indicate that a corresponding program has been set to trigger a reminder(user creates a program reminder and after confirmation, a reminder symbol has been added to the title , para 57, Fig. 10A-D). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the favorites and reminder indicators as taught in Schein with the invention of Yu in order to allow the user to quickly identify favorites and reminders from the program guide and provide an option to remove the indicators (see Schein, para 56-57).

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding claims 7, 15, 23, Yu discloses the invention above, but fails to disclose wherein, in the displaying step, the display comprises a view of currently selected programming, the view being displayed on only a part of the screen.
Schein is in the field of television program schedule listings that provide favorites listings (abstract, para 56) and teaches the display comprises a view of currently selected programming, the view being displayed on only a part of the screen (see Fig. 9E, showing favorites listing on left hand side of screen and currently viewed programming on right hand side of screen [second box on right, corresponding to box 126 of Fig. 8B], para 45-46). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the view of currently selected programming as taught in Schein with the invention of Yu so that the viewer can browse through program matrix 106 without missing the action on the currently tuned program (see Schein, para 46).

Claims 8, 16, 24 lack an inventive step under PCT Article 33(3) as being obvious over Yu in view of Lee et al., hereinafter referred to as Lee.

Regarding claims 8, 16, 24, Yu discloses wherein, in the displaying step, the listing of favorite channels and programs are presented in a first portion of the screen (user selects favorites command from 1810 to provide a list of user favorites, Fig. 18, para 120) and wherein the recommended channels are based on one or more of the user's set of favorite channels and programs and watching patterns (recommendation engine 241 obtains user behavior information to provide recommended content, para 80; the user favorites can be content items implicitly identified by using recommendation engine 241 to gather user interest information, as described above, and to correlate user interests with corresponding content items and content information, para 120, 141).
However, Lee is in the field of broadcast information on televisions (see Fig. 25, abstract) and teaches wherein, in the displaying step, the listing of favorite channels and programs are presented in a first portion of the screen (favorite channels listed within channel card 2060 on portion of screen, as seen in Fig. 39, para 326, 342) and recommended channels or programs are presented in a second portion of the screen (RECOMMENDED LIST card object 2070, Fig. 39, para 418), the first and second portions being non-overlapping (cards may be selected and presented on the display by user as seen in Fig. 39, showing favorite channel card 2060 displayed next to recommended list card object 2070, para 418; see Fig. 41-44, showing user can move card objects for display on screen, para 418-419).
It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the display features as taught in Lee with the invention of Yu in order to provide the user with multiple options when browsing television content (see Lee, para 416-419, 348).

Claims 1-24 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

VIZIO Ex. 1002, Page 3264 of 3573
VIZIO v. MMT, IPR2024-00722

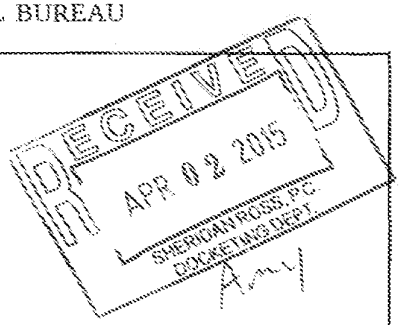
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



LENNOX-GETLE, Thaine
SHERIDAN ROSS P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*
26 February 2015 (26.02.2015)

Applicant's or agent's file *reference*
6583-449-PCT

IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055293	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Kihwan Moon

e-mail: pt01.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-449-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055293	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 10 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	02DEC 2013
Applicant's or agent's file reference 6583-449-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055293	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2013.01)
USPC - 725/61

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	12 November 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055293

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055293

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-8, 10-17, and 19-20 lack an inventive step under PCT Article 33(3) as being obvious over Kim et al, hereinafter Kim in view of Kunkel et al, hereinafter Kunkel.

Regarding Claim 1, Kim teaches a method, comprising: initiating a live television (TV) application associated with an intelligent TV (paragraph 121 for having a Smart TV or electronic device element 300 with a multi-functional display element 302 and a receiver and paragraph 328 for having real time or live broadcasting through a satellite or terrestrial broadcast system); determining, via a processor associated with the intelligent TV (paragraph 327 for having a controller element 340 or processor means to control the GUI for the smart TV element 300) and prior to enabling full functionality of the live TV application (paragraph 621 for the controller element 340 initializing the GUI element upon boot or prior to full function of the electronic device element 300 or the smart TV), that a setup of one or more channel sets associated with the live TV application is required (paragraph 328 for having a GUI to set up the electronic device with broadcast channels for receiving terrestrial and satellite channels with real time broadcasting or live TV means); presenting, via a display of the intelligent TV (paragraph 327 for the GUI being displayed on the display element 302 input boxes to enter information from the user for the smart TV element 300), a first setup option dialog (figure 31 element 3110 for the first box with channels NBC and FOX and paragraph 327 for the controller element 340 controls the display element 302 with three different input boxes for dragging and dropping), wherein the first setup option dialog is associated with a first channel set of the one or more channel sets (paragraph 327 for having a GUI with the display for setting up channels and figure 31 element 3110 for having a first list of channels CBS, FOX, and NBC etc.); selecting the first setup option dialog associated with the first channel set (figure 31 element 3110 for a first set up box with a set of channels and paragraph 327 for having a user option of selecting a channel or selecting a menu item for set up); scanning at least one signal source for one or more live TV channels (paragraph 636 for scanning channels either automatically or manually at the request of the user and controlled by the controller element 340 and paragraph 642 for scanning for broadcast channels); and enabling at least partial functionality of the live TV application upon detecting the one or more live TV channels (paragraphs 646-647 for skipping the channel scan and displaying the results of the channels found at that time or a partial list of channels along with displaying the results of the channel scan), wherein the at least partial functionality of the live TV application is associated with the detected one or more live TV channels (paragraph 328 for having real time or live broadcasting through a satellite or terrestrial broadcast system and paragraph 121 for having a Smart TV or electronic device element 300 with a multi-functional display element 302 and a receiver). Kim does not explicitly teach scanning associated with the first channel set and detecting the one or more live TV channels associated with the first channel set. Kunkel has methods for a video scan (abstract) and teaches scanning associated with the first channel set and detecting the one or more live TV channels associated with the first channel set (col 21, lines 40-67 for having two different scans associated with a criteria for the first channel set such as a user selection and having a second scan with a second criteria such as the user's behavior and then identifying or detecting the channels available according to the criteria with col 3, lines 40-60 for using both analog and digital signals for the tuner). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the scan criteria as taught by Kunkel in the smart TV method of Kim in order to scan for channels based on user behavior (Kunkel, col 21, lines 40-60).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055293

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding Claim 2, Kim teaches wherein presenting the first setup option dialog includes presenting a second option dialog (figure 31 element 3110 for the first setup dialog box with a first set of broadcast channels such as NBC and FOX and a second dialog box element 3120 with a second set of channels that are part of the social network service or SNS channels such as Facebook and Twitter and paragraph 328 for having the option of dragging and dropping the channels), wherein the second setup option dialog is associated with a second channel set of the one or more channel sets , and wherein the second option dialog is presented (figure 31 element 3120 for the first box and element 3140 for the second box), via the display of the intelligent TV, at the same time as the first setup option dialog (figure 31 for the controller element 340 controls the display element 302 with three different input boxes elements 3110, 3120, 3130 and 3140 for displayed simultaneously).

Regarding Claim 3, Kim teaches wherein the selection of the first setup option dialog is made automatically via the processor associated with the intelligent TV (paragraph 636 for having the GUI for scanning channels being displayed automatically by the controller element 340 of the smart TV element 300 and figure 31 element 3110 for having a dialog box for selecting TV channels).

Regarding Claim 4, Kim teaches wherein the selection of the first setup option dialog is made in response to detecting an input received at the intelligent TV via a remote control associated with the intelligent TV (paragraph 370 for having a remote controller associated with the TV controller element 340 for making user selections based on the channel map and paragraph 327 for the display element 302 having a GUI to detect user actions for channel set up using a menu).

Regarding Claim 5, Kim teaches wherein the at least one signal source includes at least one of an over-the-air broadcast medium, a digital TV channel source, an analog TV channel source, the Internet, a satellite provider, a cable provider, and a multiple-system operator (paragraph 32 for using signals from a satellite network, a terrestrial broadcast, as well as the internet).

Regarding Claim 6, Kim teaches presenting, via the display of the intelligent TV (paragraph 327 for having a GUI for a display element 302), a first switch option associated with the first channel set (paragraph 327 for having a menu with associated user actions for selecting a menu item with figure 31 element 3110 for having a first set of channels on the display in a box and paragraph 330 for using a switch to go to the next channel in the channel region), wherein a selection of the first switch option tunes the intelligent TV to the detected one or more live TV channels of the first channel set (paragraph 329 for having a list of channels in the first channel set element 3110, and paragraph 151 for the smart TV element 300 having a tuner element 305 for selecting a channel and tuning to the channel frequency); and presenting, via the display of the intelligent TV, a second setup option dialog (figure 31 element 3120 for having a second dialog box with a second set of channels that are social network services or SNS channels), wherein the second setup option dialog is associated with a second channel set of the one or more channel sets (figure 31 element 3130 for a second dialog box that has a second set of social network channels such as Facebook and Twitter along with information of messages for the user).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055293

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding Claim 7, Kim teaches selecting the first switch option associated with the first channel set (paragraph 327 for having a menu with associated user actions for selecting a menu item with figure 31 element 3110 for having a first set of channels on the display in a box and paragraph 330 for using a switch to go to the next channel in the channel region); and tuning the intelligent TV to the one or more live TV channels of the first channel (paragraph 329 for having a list of channels in the first channel set element 3110, and paragraph 151 for the smart TV element 300 having a tuner element 305 for selecting a channel and tuning to the channel frequency).

Regarding Claim 8, Kim teaches selecting the second setup option dialog associated with the second channel set (figure 31 for a second dialog box element 3120 with a second set of channels that are part of the social network service or SNS channels such as Facebook and Twitter and paragraph 328 for having the option of dragging and dropping the channels). Kim does not explicitly teach scanning at least one signal source associated with the second channel set for one or more live TV channels, detecting the one or more live TV channels associated with the second channel set, and enabling at least partial functionality of the live TV application upon detecting the one or more live TV channels of the second channel set, wherein the at least partial functionality of the live TV application is associated with the detected one or more live TV channels of the second channel set. Kunkel has methods for a video scan (abstract) and teaches scanning at least one signal source associated with the second channel set for one or more live TV channels scanning at least one signal source associated with the second channel set for one or more live TV channels (col 21, lines 40-67 for having two different scans associated with a criteria for the first channel set such as a user selection and having a second scan with a second criteria such as the user's behavior and then identifying or detecting the channels available according to the criteria with col 3, lines 40-60 for using both analog and digital signals for the tuner), detecting the one or more live TV channels associated with the second channel set , detecting the one or more live TV channels associated with the second channel set (col 21, lines 60-67 for identifying the channels that fit the scan criteria or detecting the channels that fit the second scan criteria of the user's behavior) and enabling at least partial functionality of the live TV application upon detecting the one or more live TV channels of the second channel set (col 22, lines 15-30 for the application upon scanning the channels of the second criteria tune to the first and second selected programs and direct the program to the display device or allowing some function of the TV to display the programs), wherein the at least partial functionality of the live TV application is associated with the detected one or more live TV channels of the second channel set (col 22, lines 30-40 for the interactive guide to sequentially display the programs and based on the scan sequences). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the scan criteria as taught by Kunkel in the smart TV method of Kim in order to scan for channels based on user behavior (Kunkel, col 21, lines 40-60).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055293

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding Claim 10, Kim teaches tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor (paragraph 121 for having a Smart TV or electronic device element 300 with a multi-functional display element 302 and a receiver with a controller or processor means element 340 and paragraph 328 for having real time or live broadcasting through a satellite or terrestrial broadcast system), perform the method comprising: initiating a live television (TV) application associated with an intelligent TV (paragraph 621 for the controller element 340 initializing the GUI element upon boot or prior to full function of the electronic device element 300 or the smart TV); determining, via a processor associated with the intelligent TV and prior to enabling full functionality of the live TV application (paragraph 621 for the controller element 340 or processor means for initializing the GUI element upon boot or prior to full function of the electronic device element 300 or the smart TV), that a setup of one or more channel sets associated with the live TV application is required (paragraph 328 for having a GUI to set up the electronic device with broadcast channels for receiving terrestrial and satellite channels with real time broadcasting or live TV means); presenting, via a display of the intelligent TV (paragraph 327 for the GUI being displayed on the display element 302 input boxes to enter information from the user for the smart TV element 300), a first setup option dialog (figure 31 element 3110 for the first box with channels NBC and FOX and paragraph 327 for the controller element 340 controls the display element 302 with three different input boxes for dragging and dropping), wherein the first setup option dialog is associated with a first channel set of the one or more channel sets (paragraph 327 for having a GUI with the display for setting up channels and figure 31 element 3110 for having a first list of channels CBS, FOX, and NBC etc.); selecting the first setup option dialog associated with the first channel set (paragraph 327 for having a GUI with the display for setting up channels and figure 31 element 3110 for having a first list of channels CBS, FOX, and NBC etc.); selecting the first setup option dialog associated with the first channel set (figure 31 element 3110 for a first set up box with a set of channels and paragraph 327 for having a user option of selecting a channel or selecting a menu item for set up); scanning at least one signal source for one or more live TV channels (paragraph 636 for scanning channels either automatically or manually at the request of the user and controlled by the controller element 340 and paragraph 642 for scanning for broadcast channels); and enabling at least partial functionality of the live TV application upon detecting the one or more live TV channels of the first channel set (paragraphs 646-647 for skipping the channel scan and displaying the results of the channels found at that time or a partial list of channels along with displaying the results of the channel scan), wherein the at least partial functionality of the live TV application is associated with the detected one or more live TV channels of the first channel set (paragraph 328 for having real time or live broadcasting through a satellite or terrestrial broadcast system and paragraph 121 for having a Smart TV or electronic device element 300 with a multi-functional display element 302 and a receiver). Kim does not explicitly teach scanning associated with the first channel set and detecting the one or more live TV channels associated with the first channel set. Kunkel has methods for a video scan (abstract) and teaches scanning associated with the first channel set and detecting the one or more live TV channels associated with the first channel set (col 21, lines 40-67 for having two different scans associated with a criteria for the first channel set such as a user selection and having a second scan with a second criteria such as the user's behavior and then identifying or detecting the channels available according to the criteria with col 3, lines 40-60 for using both analog and digital signals for the tuner). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the scan criteria as taught by Kunkel in the smart TV method of Kim in order to scan for channels based on user behavior (Kunkel, col 21, lines 40-60).

Regarding Claim 11, Kim teaches wherein presenting the first setup option dialog includes presenting a second option dialog (figure 31 element 3110 for the first setup dialog box with a first set of broadcast channels such as NBC and FOX and a second dialog box element 3120 with a second set of channels that are part of the social network service or SNS channels such as Facebook and Twitter and paragraph 328 for having the option of dragging and dropping the channels), wherein the second setup option dialog is associated with a second channel set of the one or more channel sets (figure 31 for a second dialog box element 3120 with a second set of channels that are part of the social network service or SNS channels such as Facebook and Twitter and paragraph 328 for having the option of dragging and dropping the channels), and wherein the second option dialog is presented, via the display of the intelligent TV, at the same time as the first setup option dialog (figure 31 for the controller element 340 controls the display element 302 with three different input boxes elements 3110, 3120, 3130 and 3140 for displayed simultaneously).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055293

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding Claim 12, Kim teaches wherein the selection of the first setup option dialog is made automatically via a processor associated with the intelligent TV (paragraph 636 for having the GUI for scanning channels being displayed automatically by the controller element 340 of the smart TV element 300 and figure 31 element 3110 for having a dialog box for selecting TV channels).

Regarding Claim 13, Kim teaches wherein the selection of the first setup option dialog is made in response to detecting an input received at the intelligent TV via a remote control associated with the intelligent TV (paragraph 370 for having a remote controller associated with the TV controller element 340 for making user selections based on the channel map and paragraph 327 for the display element 302 having a GUI to detect user actions for channel set up using a menu).

Regarding Claim 14, Kim teaches wherein the at least one signal source includes at least one of an over-the-air broadcast medium, a digital TV channel source, an analog TV channel source, the Internet, a satellite provider, a cable provider, and a multiple-system operator (paragraph 32 for using signals from a satellite network, a terrestrial broadcast, as well as the internet).

Regarding Claim 15, Kim teaches wherein the method further comprises: presenting, via the display of the intelligent TV (paragraph 327 for having a GUI for a display element 302), a first switch option associated with the first channel set (paragraph 327 for having a menu with associated user actions for selecting a menu item with figure 31 element 3110 for having a first set of channels on the display in a box and paragraph 330 for using a switch to go to the next channel in the channel region), wherein a selection of the first switch option tunes the intelligent TV to the detected one or more live TV channels of the first channel set (paragraph 329 for having a list of channels in the first channel set element 3110, and paragraph 151 for the smart TV element 300 having a tuner element 305 for selecting a channel and tuning to the channel frequency); and presenting, via the display of the intelligent TV (paragraph 327 for having a GUI for a display element 302), a second setup option dialog, wherein the second setup option dialog is associated with a second channel set of the one or more channel sets (figure 31 for a second dialog box element 3120 with a second set of channels that are part of the social network service or SNS channels such as Facebook and Twitter and paragraph 328 for having the option of dragging and dropping the channels).

Regarding Claim 16, Kim teaches wherein the method further comprises: selecting the first switch option associated with the first channel set (paragraph 327 for having a menu with associated user actions for selecting a menu item with figure 31 element 3110 for having a first set of channels on the display in a box and paragraph 330 for using a switch to go to the next channel in the channel region); and tuning the intelligent TV to the one or more live TV channels of the first channel set (paragraph 329 for having a list of channels in the first channel set element 3110, and paragraph 151 for the smart TV element 300 having a tuner element 305 for selecting a channel and tuning to the channel frequency).

Regarding Claim 17, Kim teaches wherein the method further comprises: selecting the second setup option dialog associated with the second channel set (figure 31 for a second dialog box element 3120 with a second set of channels that are part of the social network service or SNS channels such as Facebook and Twitter and paragraph 328 for having the option of dragging and dropping the channels). Kim does not explicitly teach scanning at least one signal source associated with the second channel set for one or more live TV channels, detecting the one or more live TV channels associated with the second channel set, and enabling at least partial functionality of the live TV application upon detecting the one or more live TV channels of the second channel set, wherein the at least partial functionality of the live TV application is associated with the detected one or more live TV channels of the second channel set. Kunkel has methods for a video scan (abstract) and teaches scanning at least one signal source associated with the second channel set for one or more live TV channels (col 21, lines 40-67 for having two different scans associated with a criteria for the first channel set such as a user selection and having a second scan with a second criteria such as the user's behavior and then identifying or detecting the channels available according to the criteria with col 3, lines 40-60 for using both analog and digital signals for the tuner), detecting the one or more live TV channels associated with the second channel set (col 21, lines 60-67 for identifying the channels that fit the scan criteria or detecting the channels that fit the second scan criteria of the user's behavior) and enabling at least partial functionality of the live TV application upon detecting the one or more live TV channels of the second channel set (col 22, lines 15-30 for the application upon scanning the channels of the second criteria tune to the first and second selected programs and direct the program to the display device or allowing some function of the TV to display the programs), wherein the at least partial functionality of the live TV application is associated with the detected one or more live TV channels of the second channel set (col 22, lines 30-40 for the interactive guide to sequentially display the programs and based on the scan sequences). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the scan criteria as taught by Kunkel in the smart TV method of Kim in order to scan for channels based on user behavior (Kunkel, col 21, lines 40-60).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055293

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding Claim 19, Kim discloses a system, comprising: an intelligent television (TV) having a display and a tuner (paragraph 121 for having a Smart TV or electronic device element 300 with a multi-functional display element 302 and a tuner element 305, and paragraph 328 for having real time or live broadcasting through a satellite or terrestrial broadcast system), wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (paragraph 151 for converting the RF signals using the tuner element 305 and demodulating the signal for display with display element 302); an input device associated with the intelligent TV (paragraph 370 for having a remote controller associated with the TV controller element 340 for making user selections based on the channel map and paragraph 327 for the display element 302 having a GUI to detect user actions for channel set up using a menu); a memory (paragraph 150 for having a storage unit element 345 with the smart TV element 300 and paragraph 187 for the storage unit element 345 having memory means); and a microprocessor operable to (paragraph 327 for having a controller element 340 or processor means to control the GUI for the smart TV element 300): initiate a live TV application associated with the intelligent TV (paragraph 621 for the controller element 340 initializing the GUI element upon boot or prior to full function of the electronic device element 300 or the smart TV); determine, prior to enabling full functionality of the live TV application (paragraph 621 for the controller element 340 initializing the GUI element upon boot or prior to full function of the electronic device element 300 or the smart TV), that a setup of one or more channel sets associated with the live TV application is required (paragraph 328 for having a GUI to set up the electronic device with broadcast channels for receiving terrestrial and satellite channels with real time broadcasting or live TV means); present, via the display of the intelligent TV (paragraph 327 for the GUI being displayed on the display element 302 input boxes to enter information from the user for the smart TV element 300), a first setup option dialog (figure 31 element 3110 for the first box with channels NBC and FOX and paragraph 327 for the controller element 340 controls the display element 302 with three different input boxes for dragging and dropping), wherein the first setup option dialog is associated with a first channel set of the one or more channel sets (paragraph 327 for having a GUI with the display for setting up channels and figure 31 element 3110 for having a first list of channels CBS, FOX, and NBC etc.); select the first setup option dialog associated with the first channel set (paragraph 327 for having a GUI with the display for setting up channels and figure 31 element 3110 for having a first list of channels CBS, FOX, and NBC etc.); selecting the first setup option dialog associated with the first channel set (figure 31 element 3110 for a first set up box with a set of channels and paragraph 327 for having a user option of selecting a channel or selecting a menu item for set up); scan at least one signal source for one or more live TV channels (paragraph 636 for scanning channels either automatically or manually at the request of the user and controlled by the controller element 340 and paragraph 642 for scanning for broadcast channels); and enable at least partial functionality of the live TV application upon detecting the one or more live TV channels of the first channel set (paragraphs 646-647 for skipping the channel scan and displaying the results of the channels found at that time or a partial list of channels along with displaying the results of the channel scan), wherein the at least partial functionality of the live TV application is associated with the detected one or more live TV channels of the first channel set (paragraph 328 for having real time or live broadcasting through a satellite or terrestrial broadcast system and paragraph 121 for having a Smart TV or electronic device element 300 with a multi-functional display element 302 and a receiver). Kim does not explicitly disclose scanning associated with the first channel set and detecting the one or more live TV channels associated with the first channel set. Kunkel has methods for a video scan (abstract) and discloses scanning associated with the first channel set and detecting the one or more live TV channels associated with the first channel set (col 21, lines 40-67 for having two different scans associated with a criteria for the first channel set such as a user selection and having a second scan with a second criteria such as the user's behavior and then identifying or detecting the channels available according to the criteria with col 3, lines 40-60 for using both analog and digital signals for the tuner). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the scan criteria as taught by Kunkel in the smart TV system of Kim in order to scan for channels based on user behavior (Kunkel, col 21, lines 40-60).

Regarding Claim 20, Kim discloses wherein the selection of the first setup option dialog is made in response to detecting an input received at the intelligent TV via the input device (paragraph 370 for having a remote controller associated with the TV controller element 340 for making user selections based on the channel map and paragraph 327 for the display element 302 having a GUI to detect user actions for channel set up using a menu).

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055293

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Claims 9 and 18 lack an inventive step under PCT Article 33(3) as being obvious over Kim et al, hereinafter Kim in view of Kunkel, and further in view of Blanchard et al, hereinafter Blanchard.

Regarding Claim 9 and 18, Kim teaches having the live TV application upon scanning all channel sets of the one or more channel sets associated with the live TV application (paragraph 647 for having the controller determine if the channel scan is complete). Kim and Kunkel do not explicitly teach enabling the full functionality of the live TV. Blanchard has a full scan of every frequency to find a channel (abstract) and teaches enabling the full functionality of the live TV (paragraph 26 for having the TV revert to normal operations or full function once the scan is complete and paragraphs 22-23 for scanning the TV channels and then enabling control for the TV to have normal operations). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the enabling of functionality as taught by Blanchard in the smart TV method of Kim in order to allow for quicker or immediate use of the TV set (Blanchard, paragraph 23).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

RECEIVED
MAR 16 2015
SHERIDAN ROSS, P.C.
DOCKETING DEPT.

To:

LENNOX-GENTLE, Thaine
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-450-PCT	IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055294	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

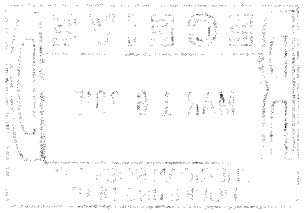
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Kihwan Moon

e-mail: pt01.pct@wipo.int

VIZIO Ex. 1002, Page 3277 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-450-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055294	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)* 02 DEC 2013

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-450-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055294	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2013.01)
USPC - 725/39

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	07 November 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055294

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055294

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-20 lacks an inventive step under PCT Article 33(3) as being obvious over Hwang in view of Klosterman et al.

Regarding claim 1, Hwang disclose a method (Metadata Display Control Method and System for Broadcast Receiver, abstract), comprising:

Presenting, via a display of an intelligent television (TV), live TV content, wherein the live TV content is presented to a first portion of the display (The display unit 140 displays the video data of the broadcast program transmitted by the broadcast station, fig.1-2, para. 0033);

Receiving an electronic program guide (EPG) presentation input at the intelligent TV (Electronic Program Guide (EPG) is referred to as "Metadata", para. 0005, 0026; Interactive TV 100 receives the broadcast programs and Metadata associated with broadcast program, fig. 2, 0036); and

Determining, by a processor associated with the intelligent TV and in response to receiving the EPG presentation input, EPG information that corresponds to at least one of the presented live TV content and the EPG presentation input received (the metadata is transmitted to the mobile terminal 300 through a Bluetooth link established between the interactive TV 100 and the mobile terminal 300, para. 0036, 0037; the controller 370 monitors to detect user command input by the viewer and determines , if a user command is detected, once determined if the metadata is received, the metadata (EPG) associated with the broadcast program is displayed, fig. 6, para. 0064-0065); and

Retrieving, from at least one source, the EPG information (the control unit 160 of the interactive TV 100 receives metadata (EPG) associated broadcast programs provided by the broadcast station or broadcast service provider, fig. 1, para. 0035).

Hwang fails to specifically teach determining, by processor, an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel. However, Klosterman et al. discloses a system/method for displaying an electronic program guide (Abstract) and teaches determining an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel (a program guide data processor 1205 and a plug-in program guide controller module 1240 wherein the module 1240 determines the program guide 1205 capabilities by allowing user to customize the program guide layout, fig. 12, col.12, lines 65-67 and col. 13, lines 10-21; a user may evoke a preview screen within the display content where the user can view EPG information within a live TV application panel which can be referred to a hypertune, fig. 6d, col. 10, lines 1-14).

Hwang teaches that the metadata (EPG) can overlap the broadcast program displayed on screen of the interactive TV 100 (fig. 2, para. 0036), but fails to specifically teach presenting, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content. However, Klosterman et al. teaches presenting, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content (a preview window or a pop-up window that can overlap the current live program while searching or messaging the program guide via user interaction, fig. 2, col. 7, lines 62-67 and fig. 5a, col. 8, lines 42-59 and fig. 6d, col. 10, lines 1-14). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the teaching of an Electronic Program Guide display system and method that includes a processor capable of processing the user command for EPG layout presentation and output displays overlays, picture-in-picture, and pop-up windows while responding to user commands during live content broadcast as taught by Klosterman et al. to incorporate the above EPG displaying features in the invention of Hwang in order to provide an easy and convenient way to manipulate the electronic program guide based on user command and preferences (Klosterman et al., col. 1, line 64 - col. 2, line 7).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055294

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 2, Hwang disclose the method of claim 1, wherein determining the EPG presentation layout further comprises:
Referring to rules stored in a memory, wherein the rules include one or more EPG information layout templates, wherein the one or more EPG information layout templates correspond to one or more EPG presentation inputs (storage 360 stores application programs associated with functions of the mobile terminal 300, metadata and sub-metadata from interactive TV or user data and may be divided into program region and a data region, fig. 4, para. 0048);
Matching the received EPG presentation input to one of the one or more EPG presentation inputs (user selects one of the items constituting the metadata, controller 370 transmits the information of the selected item to the interactive TV 100 and the metadata is displayed currently, when channel is switched or program ended, fig. 4, para.0050); and
Hwang fails to specifically teach determining, based on the match, a select EPG information layout template for the EPG presentation layout from the one or more EPG information layout templates. However, Klosterman et al. teaches determining, based on the match, a select EPG information layout template for the EPG presentation layout from the one or more EPG information layout templates (an electronic program guide that can have different display arrangements such as different typeface, different color, given additional space for program description or other graphic enhancements, thereby one can conclude that such preference is stored in a computer readable medium of the device 100, fig. 2, col. 6, lines 59-63; User can upgrade/change program guides based on preferences, col. 13, lines 10-25. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teaching of the use of EPG layout choices stored in memory based on user or provider as taught by Klosterman et al. to incorporate the above features in the invention of Hwang in order to allow modification and alterations to the program guide without requiring major hardware changes.

Regarding claim 3, Hwang discloses the method of claim 1, wherein the EPG information is retrieved from two or more signal sources (EPG information is retrieved from interactive TV control system includes broadcast receiver unit 110, data processing unit 115, a feedback data transmitter 120, Bluetooth unit 130, storage unit 120 and a control unit 160, Fig. 2, para, 0028).

Regarding claim 4, Hwang discloses the method of claim 1, wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (broadcast receiver unit 110 receives and processes the broadcast signals and transmitter 120 receives and transmits channel data via IP network, fig. 2, para. 0029 and para. 0031).

Regarding claim 5, Hwang discloses the method of claim 1, wherein at least one of EPG information and the live TV application panel is at least partially transparent, and wherein the presented live TV content is visible beneath the presented EPG information (the Bluetooth communication link established through the interactive TV 100 is disabled allowing the metadata (EPG, para. 0026) to overlap the current broadcast program displayed, fig. 1, para. 0036).

Regarding claim 6, Hwang disclose the method of claim 1, wherein the EPG presentation input is provided via an input device associated with the intelligent TV (mobile terminal 300 can communicate with interactive TV 100, the viewer may request and receive metadata from the mobile device 300, fig. 1, para. 0036 and fig. 6, para. 0064).

Regarding claim 7, Hwang disclose the method of claim 1, but fails to specifically teach wherein the EPG presentation layout is arranged to present the EPG information in a tabular format. However, Klosterman et al. teaches wherein the EPG presentation layout is arranged to present the EPG information in a tabular format (a grid format for the schedule guide display output based on an x-y axis layout, fig. 1 & fig. 3a, col. 5, lines 44-46). It would have been obvious to one of ordinary skill at the time of the invention to use the teachings of a grid format arrangement for the EPG layout displayed on the interactive TV as taught by Klosterman et al. to incorporate the above EPG presentation layout in the invention of Hwang in order to provide multiple options for viewing and selecting EPG information for user, providing an easier access to information or by providing a user a customization experience.

Regarding claim 8, Hwang disclose the method of claim 7, but fails to specifically teach wherein the tabular format is ordered by at least one of channel number and time associated with the EPG information. However, Klosterman et al. teaches wherein the tabular format is ordered by at least one of channel number and time associated with the EPG information (guide screen 200 contains cells 245 and each cell may contain channel number 32, program service name, and Program Broadcast Service name, fig. 2, col. 6, lines 46-52; an EPG layout format that includes channel name, time and additional information as it relates to the EPG information provided (fig. 4a, col. 8, lines 17-25). It would have been obvious to one of ordinary skill at the time of the invention to use the teaching of a program guide with program detail information such as time, name and channel of the program information as taught by Klosterman et al. to incorporate the above features in the invention of Hwang in order to provide user with detailed information and options for easy manipulation by user in an electronic program guide system and method.

Regarding claim 9, Hwang disclose the method of claim 8, wherein the EPG information is associated with preferred content (controller 370 detects and determines user commands and user selection command of metadata (EPG) associated with broadcast program, fig. 6, para. 0064-0066).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055294

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 10, Hwang disclose the method of claim 1, further comprising:
Determining a select-focus is associated with an EPG entry in the presented EPG information (Controller 370 determines user selection command input based on the received metadata (EPG) information, fig. 6, para. 0065-0066).
Hwang fails to specifically teach initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer. However, Klosterman et al. teaches initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer (a guide screen 400 having an interactive information region where the user can select a program that has a later scheduled time and may select the recording option or the auto tune option to view upcoming program or the description of the program content, fig. 4,col. 8, lines 26-41).
Hwang also fails to specifically teach presenting, upon reaching the goal time, an EPG preview window adjacent to the EPG entry associated with the select-focus, wherein the EPG preview window includes at least one of a thumbnail graphic, a description, and a time associated with the EPG entry. However, Klosterman et al. teaches presenting, upon reaching the goal time, an EPG preview window adjacent to the EPG entry associated with the select-focus, wherein the EPG preview window includes at least one of a thumbnail graphic, a description, and a time associated with the EPG entry (a guide screen 500 that has an interactive region 520 where message screen 550 displays description of the program content and may contain an icon linked to a short video preview and the preview may be in the form of picture-in-picture displaying possible information about upcoming program, fig. 5a-b, col. 8, lines 43-59). It would have been obvious to one of ordinary skill at the time of the invention to use the teachings of a timer and a preview window capable of recording or auto tuning broadcast programs along with EPG information displayed in a preview window as taught by Klosterman et al. to incorporate the above EPG features in the invention of Hwang in order to provide users with the convenience of viewing a program at a later time or to preview a program to determine the user's preference.

Regarding claim 11, Hwang discloses the method of claim 10, wherein the EPG preview window includes a preview indicator, and wherein the preview indicator is linked to the EPG entry (the Interactive TV 100 displays a query message asking whether to receive the metadata (EPG) in the form of pop-up window, for example a user selects a channel on the interactive TV 100, then a pop-up window is displayed presenting a querying message asking whether to receive metadata (EPG) associated with broadcast program on display, fig. 5, para. 0056-0057).

Regarding claim 12, Hwang disclose a tangible, non-transitory computer readable medium having instructions stored there on that, when executed by a processor (storage unit 360 stores application programs, metadata and sub metadata, fig. 3, para.0048), perform the method comprising:
Presenting, via a display of an intelligent television (TV), live TV content, wherein the live TV content is presented to a first portion of the display (The display unit 140 displays the video data of the broadcast program transmitted by the broadcast station, fig.1-2, para. 0033);
Receiving an electronic program guide (EPG) presentation input at the intelligent TV (Electronic Program Guide (EPG) is referred to as "Metadata", para. 0026; Interactive TV 100 receives the broadcast programs and Metadata associated with broadcast program, fig. 2, para. 0036); and
Determining, by a processor associated with the intelligent TV and in response to receiving the EPG presentation input, EPG information that corresponds to at least one of the presented live TV content and the EPG presentation input received (the metadata is transmitted to the mobile terminal 300 through a Bluetooth link established between the interactive TV 100 and the mobile terminal 300, para. 0036, 0037; the controller 370 monitors to detect user command input by the viewer and determines , if a user command is detected, once determined if the metadata is received, the metadata (EPG) associated with the broadcast program is displayed, fig. 6, para. 0064-0065); and
Retrieving, from at least one source, the EPG information (the control unit 160 of the interactive TV 100 receives metadata (EPG) associated broadcast programs provided by the broadcast station or broadcast service provider, fig. 1, para. 0035).
Hwang fails to specifically teach determining, by processor, an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel. However, Klosterman et al. discloses a system/method for displaying an electronic program guide (Abstract) and teaches determining an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel (a program guide data processor 1205 and a plug-in program guide controller module 1240 wherein the module 1240 determines the program guide 1205 capabilities by allowing user to customize the program guide layout, fig. 12, col.12, lines 65-67 and col. 13, lines 10-21; a user may evoke a preview screen within the display content where the user can view EPG information within a live TV application panel which can be referred to a hypertune, fig. 6d, col. 10, lines 1-14).
Hwang teaches that the metadata (EPG) can overlap the broadcast program displayed on screen of the interactive TV 100 (fig. 2, para. 0036), but fails to specifically teach presenting, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content. However, Klosterman et al. teaches presenting, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content (a preview window or a pop-up window that can overlap the current live program while searching or messaging the program guide via user interaction, fig. 2, col. 7, lines 62-67 and fig. 5a, col. 8, lines 42-59 and fig. 6d, col. 10, lines 1-14). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the teaching the teaching of an Electronic Program Guide display system and method that includes a processor capable of processing the user command for EPG layout presentation and output displays overlays, picture-in-picture, and pop-up windows while responding to user commands during live content broadcast as taught by Klosterman et al. to incorporate the above EPG displaying features in the invention of Hwang in order to provide an easy and convenient way to manipulate the electronic program guide based on user command and preferences (Klosterman et al., col. 1, line 64 - col. 2, line 7).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055294

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding claim 13, Hwang disclose the tangible, non-transitory computer readable medium of claim 12, wherein determining the EPG presentation layout further comprises:

Referring to rules stored in a memory, wherein the rules include one or more EPG information layout templates, wherein the one or more EPG information layout templates correspond to one or more EPG presentation inputs (storage 360 stores application programs associated with functions of the mobile terminal 300, metadata and sub-metadata from interactive TV or user data and may be divided into program region and a data region, fig. 4, para. 0048);

Matching the received EPG presentation input to one of the one or more EPG presentation inputs (user selects one of the items constituting the metadata, controller 370 transmits the information of the selected item to the interactive TV 100 and the metadata is displayed currently, when channel is switched or program ended, fig. 4, para.0050).

Hwang fails to specifically teach determining, based on the match, a select EPG information layout template for the EPG presentation layout from the one or more EPG information layout templates. However, Klosterman et al. teaches determining, based on the match, a select EPG information layout template for the EPG presentation layout from the one or more EPG information layout templates (an electronic program guide that can have different display arrangements such as different typeface, different color, given additional space for program description or other graphic enhancements, thereby one can conclude that such preference is stored in a computer readable medium of the device 100, fig. 2, col. 6, lines 59-63; User can upgrade/change program guides based on preferences, col. 13, lines 10-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of the use of EPG layout choices stored in memory based on user or provider as taught by Klosterman et al. to incorporate the above desired EPG features in the invention of Hwang in order to allow modification and alterations to the program guide without requiring major hardware changes.

Regarding claim 14, Hwang discloses the tangible, non-transitory computer readable medium of claim 12, wherein the EPG information is retrieved from two or more signal sources (EPG information is retrieved from interactive TV control system includes broadcast receiver unit 110, data processing unit 115, a feedback data transmitter 120, Bluetooth unit 130, storage unit 120 and a control unit 160, Fig. 2, para, 0028).

Regarding claim 15, Hwang discloses the tangible, non-transitory computer readable medium of claim 12, wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (broadcast receiver unit 110 receives and processes the broadcast signals and transmitter 120 receives and transmits channel data via IP network, fig. 2, para. 0029 and para. 0031).

Regarding claim 16, Hwang discloses the tangible, non-transitory computer readable medium of claim 12, wherein at least one of EPG information and the live TV application panel is at least partially transparent, and wherein the presented live TV content is visible beneath the presented EPG information (the Bluetooth communication link established through the interactive TV 100 is disabled allowing the metadata (EPG, para. 0026) to overlap the current broadcast program displayed, fig. 1, para. 0036).

Regarding claim 17, Hwang disclose the tangible, non-transitory computer readable medium of claim 12, but fails to specifically teach wherein the EPG presentation layout is arranged to present the EPG information in a tabular format. However, Klosterman et al. teaches wherein the EPG presentation layout is arranged to present the EPG information in a tabular format (a grid format for the schedule guide display output based on an x-y axis layout, fig. 1 & fig. 3a, col. 5, lines 44-46). ITherefore, it would have been obvious to one of ordinary skill at the time of the invention to combine a grid format arrangement for the EPG layout displayed on the interactive TV as taught by Klosterman et al. to incorporate the above desired EPG displaying format in the invention of Hwang in order to provide multiple options for viewing and selecting EPG information for user, providing an easier access to information or by providing a user a customization experience.

Regarding claim 18, Hwang disclose the tangible, non-transitory computer readable medium of claim 12, wherein the method further comprising:
Determining a select-focus is associated with an EPG entry in the presented EPG information (Controller 370 determines user selection command input based on the received metadata (EPG) information, fig. 6, para. 0065-0066).
Hwang fails to specifically teach initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer. However, Klosterman et al. teaches initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer (a guide screen 400 having an interactive information region where the user can select a program that has a later scheduled time and may select the recording option or the auto tune option to view upcoming program or the description of the program content, fig. 4,col. 8, lines 26-41).
Hwang also fails to specifically teach presenting, upon reaching the goal time, an EPG preview window adjacent to the EPG entry associated with the select-focus, wherein the EPG preview window includes at least one of a thumbnail graphic, a description, and a time associated with the EPG entry. However, Klosterman et al. teaches presenting, upon reaching the goal time, an EPG preview window adjacent to the EPG entry associated with the select-focus, wherein the EPG preview window includes at least one of a thumbnail graphic, a description, and a time associated with the EPG entry (a guide screen 500 that has an interactive region 520 where message screen 550 displays description of the program content and may contain an icon linked to a short video preview and the preview may be in the form of picture-in-picture displaying possible information about upcoming program, fig. 5a-b, col. 8, lines 43-59). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the teachings of a timer and a preview window capable of recording or auto tuning broadcast programs along with EPG information displayed in a preview window as taught by Klosterman et al. to incorporate the above desired EPG features in the invention of Hwang in order to provide users with the convenience of viewing a program at a later time or to preview a program to determine the user's preference.

Regarding claim 19, Hwang discloses the tangible, non-transitory computer readable medium of claim 12, wherein the EPG preview window includes a preview indicator, and wherein the preview indicator is linked to the EPG entry (the Interactive TV 100 displays a query message asking whether to receive the metadata (EPG) in the form of pop-up window, for example a user selects a channel on the interactive TV 100, then a pop-up window is displayed presenting a querying message asking whether to receive metadata (EPG) associated with broadcast program on display, fig. 5, para. 0056-0057).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055294

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 20, Hwang disclose a system (Interactive TV of a metadata display control system, abstract, fig.1) comprising:
An intelligent television (TV) having a display and a tuner, wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (Interactive TV 100 having display unit 140 and broadcast receiver unit 110 includes a tuner and demodulator which receives and converts broadcast signal to be outputted to the display unit 140, fig. 2, para. 0029-0030);
An input device associated with the intelligent TV (mobile terminal 300, fig. 1, para. 0032);
A memory (storage unit 150 and storage 360 stores application programs, metadata, sub metadata, and recorded broadcast programs fig. 2, para. 0034 and fig. 4, para. 0048); and
A microprocessor (Data processing unit 115, fig. 2, para. 0030) operable to:
Present, via a display of an intelligent television (TV), live TV content, wherein the live TV content is presented to a first portion of the display (The display unit 140 displays the video data of the broadcast program transmitted by the broadcast station, fig:1-2, para. 0033);
Receive an electronic program guide (EPG) presentation input at the intelligent TV (Electronic Program Guide (EPG) is referred to as "Metadata", para. 0005, 0026; Interactive TV 100 receives the broadcast programs and Metadata associated with broadcast program, fig. 2, para. 0036); and
Determine, in response to receiving the EPG presentation input, EPG information that corresponds to at least one of the presented live TV content and the EPG presentation input received (the metadata is transmitted to the mobile terminal 300 through a Bluetooth link established between the interactive TV 100 and the mobile terminal 300, para. 0036, 0037; the controller 370 monitors to detect user command input by the viewer and determines , if a user command is detected, once determined if the metadata is received, the metadata (EPG) associated with the broadcast program is displayed, fig. 6, para. 0064-0065); and
Retrieve, from at least one source, the EPG information (the control unit 160 of the interactive TV 100 receives metadata (EPG) associated broadcast programs provided by the broadcast station or broadcast service provider, fig. 1, para. 0035).
Hwang fails to specifically teach determine, an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel. However, Klosterman et al. discloses a system/method for displaying an electronic program guide (Abstract) and teaches determine an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel (a program guide data processor 1205 and a plug-in program guide controller module 1240 wherein the module 1240 determines the program guide 1205 capabilities by allowing user to customize the program guide layout, fig. 12, col.12, lines 65-67 and col. 13, lines 10-21; a user may evoke a preview screen within the display content where the user can view EPG information within a live TV application panel which can be referred to a hypertune, fig. 6d, col. 10, lines 1-14).
Hwang teaches that the metadata (EPG) can overlap the broadcast program displayed on screen of the interactive TV 100 (fig. 2, para. 0036), but fails to specifically teach present, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content. However, Klosterman et al. teaches resent, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content (a preview window or a pop-up window that can overlap the current live program while searching or messaging the program guide via user interaction, fig. 2, col. 7, lines 62-67 and fig. 5a, col. 8, lines 42-59 and fig. 6d, col. 10, lines 1-14). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the teaching of an Electronic Program Guide display system and method that includes a processor capable of processing the user command for EPG layout presentation and output displays overlays, picture-in-picture, and pop-up windows while responding to user commands during live content broadcast as taught by Klosterman et al. to incorporate the above EPG displaying features in the invention of Hwang in order to provide an easy and convenient way to manipulate the electronic program guide based on user command and preferences (Klosterman et al., col. 1, line 64 - col. 2, line 7).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

PEARSON, Kendria, E.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-452-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055493	18 August 2013 (18.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Kihwan Moon

e-mail: pt01.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-452-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055493	International filing date *(day/month/year)* 18 August 2013 (18.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Kendria E. Pearson
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	07 NOV 2013
Applicant's or agent's file reference 6583-452-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55493	18 August 2013 (18.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 3/00, 13/00; H04N 5/445, 7/14 (2013.01)
USPC - 725/037, 39; 348/14.07

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to th IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	30 October 2013 (30.10.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55493

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55493

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	NONE	YES
	Claims	1-20	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by US 5,539,479 A Bertram.

As to claim 1, Bertram discloses a method, comprising: presenting, via a display of an intelligent television (TV) (set top devices used as accessories to television receivers may be incorporated directly into which are here called intelligent television receivers, column 33, lines 29-33), live TV broadcast content, wherein the live TV broadcast content is presented to a first portion of the display (the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, Figure 17, column 41, lines 34-39); receiving an application panel input at the intelligent TV, wherein the application panel input corresponds to at least one of a categories input, a favorites input, and a search input (When viewed channels or signal sources are thus constructed into a list, the list may be named such as "Fri Night" for favorite programs (favorites input) viewed that evening or "Kids" for programming specifically selected by or for children (categories input) and saved in system memory, Figure 17, column 41, lines 42-47); determining, by a processor associated with the intelligent TV and in response to receiving the application panel input, live TV application panel content that corresponds to a live TV application and the application panel input received (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); retrieving, from at least one source, the live TV application panel content (the display controller modifies displayed visual images by displaying over a portion of a live video images a menu display from which the human observer may select further modifications, FIGS. 13 through 15 column 40, lines 64-67); and presenting; via the display, the live TV application panel content to a second portion of the display, wherein the second portion of the display is associated with a live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV broadcast content (the video stream images (live TV) is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices (TV application panel), Figure 17, column 41, lines 34-39).

As to claim 2, Bertram discloses the method of claim 1, wherein determining the live TV application panel content further comprises: referring to rules stored in a memory (the CPU may access control programs stored, for example, in the set top device system memory 45 so as to be accessible to the processor, for controlling the display of visual images by said video display device, column 8, lines 34-39), wherein the rules include one or more application panel content fields mapped to at least one live TV application panel content type (a human observer may cause a processor controlling the video display to execute a control program formulated in a particularly concise language (rules) and controlling the display of menus (TV application panel), Abstract); comparing a live TV application panel content type associated with the presented live TV broadcast content with the one or more mapped application panel content fields (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); determining select application panel content fields from the one or more mapped application panel content fields (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" (Selection A) and "Sports" (Selection B). If "Weather" is selected, it creates Card2, since this is the action in the "Selection A" line. Card2 is a flow card which immediately displays Card3 since the condition "1=-1" is true, column 37, line 52 through column 38, line 2); and including the select application panel content fields in the live TV application panel content for retrieval (selecting "Menu" (select application panel) will take an observer to the screen of FIG. 17, where the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, column 41, lines 33-38).

As to claim 3, Bertram discloses the method of claim 1, wherein the live TV application panel content is retrieved from two or more signal sources (the video stream images (source 1) is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices (source 2), column 41, lines 33-38).

As to claim 4, Bertram discloses the method of claim 1, wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (The television receiver may be one configured to receive broadcast signals of NTSC or PAL standards, column 4, lines 62-64).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55493

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Box V: Citations and Explanations-***-

As to claim 5, Bertram discloses the method of claim 1, wherein at least one of the live TV application panel content and the live TV application panel is at least partially transparent, and wherein the presented live TV broadcast content is visible beneath the presented live TV application panel content (a user may cause a first level of menu to appear in overlay over the video stream and where the comparator may also be used to provide a pixel plane effect, to give transparent colors (partially transparent), column 37, lines 61-62 and column 19, lines 43-46).

As to claim 6, Bertram discloses the method of claim 1, wherein a size of the first portion is maintained upon presenting the live TV application panel content via the second portion of the display (a major portion (size) of the available field is occupied by the video stream image the image of a weather map, partially obscured in FIGS. 14 and 15 by the overlain menus and informational text while a minor portion (size) is occupied by the displayed menu(s), Figure 13, column 41, lines 1-5).

As to claim 7, Bertram discloses the method of claim 1, wherein the presented live TV broadcast content includes at least one of a movie, a TV program, a sport event, a TV special, and a radio program (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" Selection A and "Sports" Selection B, Figures 17 and 18, column 37, lines 62-66).

As to claim 8, Bertram discloses the method of claim 7, wherein the presented live TV application panel content includes at least one of a category, a channel identifier, a thumbnail graphic, an electronic program guide (EPG), a favorite, and a search term (the remote control functions enables use of the embodied icons (thumbnail graphic) such as the iconic representations of "channel up" or "channel down" (channel identifier) found in remote control functionality for navigation among programming choices. However, by selecting "List" or "Menu", other services may be accessed, Figures 17 and 18, column 41, lines 27-33).

As to claim 9, Bertram discloses a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor (the CPU may access control programs stored, for example, in the set top device system memory 45 so as to be accessible to the processor, for controlling the display of visual images by said video display device, column 8, lines 34-39), perform the method comprising: presenting, via a display of an intelligent television (TV) (set top devices used as accessories to television receivers may be incorporated directly into which are here called intelligent television receivers, column 33, lines 29-33), live TV broadcast content, wherein the live TV broadcast content is presented to a first portion of the display (the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, Figure 17, column 41, lines 34-39); receiving an application panel input at the intelligent TV, wherein the application panel input corresponds to at least one of a categories input, a favorites input, and a search input (When viewed channels or signal sources are thus constructed into a list, the list may be named such as "Fri Night" for favorite programs (favorites input) viewed that evening or "Kids" for programming specifically selected by or for children (categories input) and saved in system memory, Figure 17, column 41, lines 42-47); determining, by a processor associated with the intelligent TV and in response to receiving the application panel input, live TV application panel content that corresponds to a live TV application and the application panel input received (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); retrieving, from at least one source, the live TV application panel content (the display controller modifies displayed visual images by displaying over a portion of a live video images a menu display from which the human observer may select further modifications, FIGS. 13 through 15 column 40, lines 64-67); and presenting, via the display, the live TV application panel content to a second portion of the display, wherein the second portion of the display is associated with a live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV broadcast content (the video stream images (live TV) is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices (TV application panel), Figure 17, column 41, lines 34-39).

As to claim 10, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein determining the live TV application panel content of the method further comprises: referring to rules stored in a memory (the CPU may access control programs stored, for example, in the set top device system memory 45 so as to be accessible to the processor, for controlling the display of visual images by said video display device, column 8, lines 34-39), wherein the rules include one or more application panel content fields mapped to at least one live TV application panel content type (a human observer may cause a processor controlling the video display to execute a control program formulated in a particularly concise language (rules) and controlling the display of menus (TV application panel), Abstract); comparing a live TV application panel content type associated with the presented live TV broadcast content with the one or more mapped application panel content fields (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); determining select application panel content fields from the one or more mapped application panel content fields (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" (Selection A) and "Sports" (Selection B). If "Weather" is selected, it creates Card2, since this is the action in the "Selection A" line. Card2 is a flow card which immediately displays Card3 since the condition "1=-1" is true, column 37, line 52 through column 38, line 2); and including the select application panel content fields in the live TV application panel content for retrieval (selecting "Menu" (select application panel) will take an observer to the screen of FIG. 17, where the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, column 41, lines 33-38).

As to claim 11, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein the live TV application panel content is retrieved from two or more signal sources (the video stream images (source 1) is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices (source 2), column 41, lines 33-38).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55493

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claim 12, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (The television receiver may be one configured to receive broadcast signals of NTSC or PAL standards, column 4, lines 62-64).

As to claim 13, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein at least one of the live TV application panel content and the live TV application panel is at least partially transparent, and wherein the presented live TV broadcast content is visible beneath the presented live TV application panel content (a user may cause a first level of menu to appear in overlay over the video stream and where the comparator may also be used to provide a pixel plane effect, to give transparent colors (partially transparent), column 37, lines 61-62 and column 19, lines 43-46).

As to claim 14, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein a size of the first portion is maintained upon presenting the live TV application panel content via the second portion of the display (a major portion (size) of the available field is occupied by the video stream image the image of a weather map, partially obscured in FIGS. 14 and 15 by the overlain menus and informational text while a minor portion (size) is occupied by the displayed menu(s), Figure 13, column 41, lines 1-5).

As to claim 15, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein the application panel input is provided via an input device associated with the intelligent TV information (the remote control functions enables use of the embodied icons such as the iconic representations of "channel up" or "channel down" found in remote control functionality for navigation among programming choices, Figures 17 and 18, column 41, lines 27-33).

As to claim 16, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein the presented live TV broadcast content includes at least one of a movie, a TV program, a sport event, a TV special, and a radio program (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" Selection A and "Sports" Selection B, Figures 17 and 18, column 37, lines 62-66).

As to claim 17, Bertram discloses the tangible, non-transitory computer readable medium of claim 16, wherein the presented live TV application panel content includes at least one of a program description, a channel identifier, a thumbnail graphic, an electronic program guide (EPG), and preference information (the remote control functions enables use of the embodied icons (thumbnail graphic) such as the iconic representations of "channel up" or "channel down" (channel identifier) found in remote control functionality for navigation among programming choices. However, by selecting "List" or "Menu", other services may be accessed, Figures 17 and 18, column 41, lines 27-33).

As to claim 18, Bertram discloses a system, comprising: an intelligent television (TV) having a display and a tuner, wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (set top boxes which may be in the form of cable tuner systems, column 4 lines 28-34); an input device associated with the intelligent TV (set top devices used as accessories to television receivers may be incorporated directly into which are here called intelligent television receivers, column 33, lines 29-33); a memory (the processor 39 is operatively connected with system memory 45, column 6, lines 58-59); and a microprocessor operable to (a microprocessor 48 functioning as a central processing unit or CPU, column 6, lines 59-60): present, via a display of an intelligent television (TV) (set top devices used as accessories to television receivers may be incorporated directly into which are here called intelligent television receivers, column 33, lines 29-33), live TV broadcast content, wherein the live TV broadcast content is presented to a first portion of the display (the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, Figure 17, column 41, lines 34-39); receive an application panel input at the intelligent TV, wherein the application panel input corresponds to at least one of a categories input, a favorites input, and a search input (When viewed channels or signal sources are thus constructed into a list, the list may be named such as "Fri Night" for favorite programs (favorites input) viewed that evening or "Kids" for programming specifically selected by or for children (categories input) and saved in system memory, Figure 17, column 41, lines 42-47); determine, by a processor associated with the intelligent TV and in response to receiving the application panel input, live TV application panel content that corresponds to a live TV application and the application panel input received (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); retrieve, from at least one source, the live TV application panel content (the display controller modifies displayed visual images by displaying over a portion of a live video images a menu display from which the human observer may select further modifications, FIGS. 13 through 15 column 40, lines 64-67); and present, via the display, the live TV application panel content to a second portion of the display, wherein the second portion of the display is associated with a live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV broadcast content (the video stream images (live TV) is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices (TV application panel), Figure 17, column 41, lines 34-39).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55493

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claim 19, Bertram discloses the system of claim 18, wherein the microprocessor is further operable to: refer to rules stored in a memory (the CPU may access control programs stored, for example, in the set top device system memory 45 so as to be accessible to the processor, for controlling the display of visual images by said video display device, column 8, lines 34-39), wherein the rules include one or more application panel content fields mapped to at least one live TV application panel content type (a human observer may cause a processor controlling the video display to execute a control program formulated in a particularly concise language (rules) and controlling the display of menus (TV application panel), Abstract); compare a live TV application panel content type associated with the presented live TV broadcast content with the one or more mapped application panel content fields (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); determine select application panel content fields from the one or more mapped application panel content fields (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" (Selection A) and "Sports" (Selection B). If "Weather" is selected, it creates Card2, since this is the action in the "Selection A" line. Card2 is a flow card which immediately displays Card3 since the condition "1=-1" is true, column 37, line 52 through column 38, line 2); and include the select application panel content fields in the live TV application panel content for retrieval (selecting "Menu" (select application panel) will take an observer to the screen of FIG. 17, where the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, column 41, lines 33-38).

As to claim 20, Bertram discloses the system of claim 18, wherein at least one of the live TV application panel content and the live TV application panel is at least partially transparent, and wherein the presented live TV broadcast content is visible beneath the presented live TV application panel content (a user may cause a first level of menu to appear in overlay over the video stream and where the comparator may also be used to provide a pixel plane effect, to give transparent colors (partially transparent), column 37, lines 61-62 and column 19, lines 43-46).

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:

RECEIVED
MAR 16 2015
SHERIDAN ROSS, P.C.
DOCKETING DEPT.

LENNOX-GENTLE, Thaine
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
26 February 2015 (26.02.2015)	
Applicant's or agent's file reference: 6583-453-PCT	**IMPORTANT NOTICE**
International application No.: PCT/US2013/036828	International filing date *(day/month/year)*: 16 April 2013 (16.04.2013)
Priority date *(day/month/year)*: 17 August 2012 (17.08.2012)	
Applicant: FLEXTRONICS AP, LLC	

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

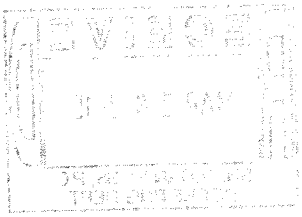
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Nora Lindner

e-mail: pt05.pct@wipo.int

VIZIO Ex. 1002, Page 3295 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-453-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/036828	International filing date *(day/month/year)* 16 April 2013 (16.04.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 10 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Nora Lindner e-mail: pt05.pct@wipo.int

Form PCT/IB/373 (January 2004)

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	28 JUN 2013
Applicant's or agent's file reference 6583-453-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/036828	16 April 2013	14 June 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/173 (2013.01)
USPC - 725/34

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	05 June 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/036828

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

   ☐ on paper

   ☐ in electronic form

   b. (time)

   ☐ in the international application as filed

   ☐ together with the international application in electronic form

   ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036828

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-24	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-24	NO
Industrial applicability (IA)	Claims	1-24	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-10, 12, and 14-24 lack an inventive step under PCT Article 33(3) as being obvious over Macrae et al, hereinafter Macrae in view of Ellis et al, hereinafter Ellis.

Regarding Claim 1, Macrae teaches a method for navigating through channels on a television (paragraph 29 for the user using a television channel guide and selecting a program to watch with figure 1A element 10 for an electronic program guide), comprising: receiving a first directional input via an input device associated with the television (paragraph 29 for using a remote control or user input device associated with the television and paragraph 33 for moving through the guide using arrows or a first directional input on arrow keys elements 28 and 30 for going up and down through the guide); determining, based on a first direction associated with the first directional input (paragraph 33 for moving the cursor on the guide using arrow keys elements 28 and 30 to highlight one of the nine program on the guide in the first vertical direction both upward and downwards), a display of at least one channel information card via the television (paragraph 35 for selecting the information key on the remote control to display an information box or channel information card for the given program and paragraph 36 for means to customize the location and size of the information on the screen); retrieving, from a memory, a first image that is representative of broadcast content playing on a first channel (figure 1A element 14 for having a grid guide with a first image of the stored freeze frame image, paragraph 58 for having the microprocessor having storing means to capture an image of Channel A or means to store an image and downloading the image or retrieving the image to access a website, with paragraph 78 for showing logos and graphics associated with channels), wherein the first image is retrieved from the memory in the absence of tuning to the first channel (paragraph 36 for having an advertisement or image for a future program as a virtual ad from RAM or memory for a channel, therefore not tuning to the future program but showing an image to the user see the advertisement for the future program and paragraph 78 for having a pointer associated with the logo and graphics to an episode of a show in a database); displaying, via the television, the first image on a first channel information card (paragraph 59 for using the first image on the first channel A as part of an interactive television display and figure 1A element 14 for a first advertisement card with information for other channels with paragraph 78 for the advertisement have episode and airtime information for a channel or show along with logo or first image information); receiving a second directional input via the input device (paragraph 33 for moving the cursor on the guide using arrow keys elements 32 and 34 to highlight one of the nine program on the guide in the horizontal direction or a second direction); determining, based on a second direction associated with the second directional input (paragraph 29 for using a remote control input device and paragraph 33 for using the arrows or directional input to move the guide cursor in a horizontal direction to view future programs), a second channel information card to display via the television (figure 1A element 16 for having a second image location for putting information on the electronic guide element 10 with paragraph 58 for means to retrieve a stored image of a live broadcast to display in the ad location element 16), wherein the second channel information card includes a second image that is representative of broadcast content playing on a second channel (figure 1A element 16 for having means to display a second stored image on the guide display with paragraph 36 for the image having information on future programs and paragraph 79 for using graphic logos along with the channel program information), and wherein the second image is retrieved from the memory in the absence of tuning to the second channel (paragraph 59 for storing the freeze frame image in RAM and using it as part of an interactive display anytime the microprocessor is triggered, paragraph 78 for having graphics and logo information in a database therefore accessing without having to tune to a channel such as accessing the NBC logo); and displaying, via the television, the second image on the second channel information card (figure 1A element 16 for displaying location for the second stored image and paragraph 36 for watching the selected program). Macrae does not explicitly teach a presentation layout for each of the channel information cards. Ellis has an electronic program schedule system with product ordering capability which includes a data processor for receiving program schedule information for a plurality of programs (abstract) and teaches a presentation layout for each of the channel information cards (figure 11 for a presentation display for an individual channel card with an image and channel information and paragraph 127 for having a multiple window or split screen operation for browsing channels and images or previews of channels with paragraph 218 for scrolling through different movies and formats or using directional movement to select channels). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the layout as taught by Ellis in the media method of Macrae in order to simultaneously display multiple broadcast programs on a single screen (Ellis, paragraph 127).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036828

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding Claim 2, Macrae teaches detecting a selection input (paragraph 29 for using a remote control as a selection input device), wherein the selection input is at least one of a timed response to a channel navigation condition and an active selection provided via the input device, and wherein the selection input corresponds to a selection of a channel associated with a displayed channel information card (paragraph 33 for selecting a channel by highlighting the channel using the cursor and the arrows to locate the desired program with the active channel shown in the PIP window figure 1A element 12); and tuning, in response to detecting the selection input (paragraph 29 for using the remote control to select a channel to view or to tune to using the selection input of the remote control with paragraph 37 for using the guide system to tune to a desired channel), the television to receive and display live broadcast content of the channel associated with the selected channel information card (paragraph 29 for pressing the select button on the remote control to watch a program in full screen mode).

Regarding Claim 3, Macrae teaches wherein the memory is associated with an electronic programming guide (EPG) (figure 1A element 10 for an electronic programming guide with channels element 52).

Regarding Claim 4, Macrae teaches wherein the first image is an enlarged thumbnail graphic retrieved from an EPG (figure 1A element 14 for the first image is a enlarged thumbnail graphic on the left side of the screen in the middle section under the picture in picture of the current program and above the second thumbnail image with paragraph 24 for having the positions and sizes of the elements of the guide on the screen being customizable).

Regarding Claim 5, Macrae teaches wherein the memory is associated with the television, and wherein the first image is configured to indicate at least one of (paragraph 58 for taking an image shot of Channel A or a first image and storing the image by capturing the video frame) an availability of broadcast content preview, an availability of broadcast content, and an availability of a broadcast signal associated with the first channel (paragraph 59 for taking the stored image in RAM and using it as part of an interactive screen display for selecting or purchasing a product; figure 1A element 16 for having means to display a second stored image on the guide display with paragraph 36 for the image having information on future programs).

Regarding Claim 6, Macrae teaches wherein the directional input is an upward directional input or a downward directional input (paragraph 33 for having a remote control to move the cursor in an upward direction element 30 or a downward direction element 32 using arrows on the remote control device), wherein the upward directional input has an upward direction, and the downward directional input has a downward direction (paragraph 33 for having a remote control to move the cursor in an upward direction element 30 or a downward direction element 32 using arrows on the remote control device covering both upward and downward directions).

Regarding Claim 7, Macrae teaches wherein the presentation layout is arranged to display a single channel information card via the television (paragraph 24 for showing an information box or information card for the single highlighted channel as shown in figure 1A for the highlighted single channel show prime time live highlighted with the cursor element 36 with the information card element 24).

Regarding Claim 8, Macrae teaches wherein the second directional input has an upward direction (paragraph 33 for having a remote control to move the cursor in an upward direction element 30 using arrows on the remote control device), and wherein the upward direction moves the first channel information card upwardly out of a selection focus area of the television while (figure 1A element 52 for a grid tile on the electronic guide element 10 for having the selected channels in the focus area with the highlighted channel element 36 along with the associated information card element 24). Macrae does not explicitly teach simultaneously moving the second channel information card upwardly into the selection focus area of the television. Ellis has an electronic program schedule system with product ordering capability which includes a data processor for receiving program schedule information for a plurality of programs (abstract) and teaches simultaneously moving the second channel information card upwardly into the selection focus area of the television (paragraph 127 for having a multiple window or split screen operation for browsing channels and images or previews of channels simultaneously using a browse feature or directional moving of information). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the layout as taught by Ellis in the media method of Macrae in order to simultaneously display multiple broadcast programs on a single screen (Ellis, paragraph 127).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036828

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding Claim 9, Macrae teaches wherein the second directional input has a downward direction (paragraph 33 for having a remote control to move the cursor in a downward direction element 32 using arrows on the remote control device), and wherein the downward direction moves the first channel information card downwardly out of a selection focus area of the television (figure 1A element 52 for a grid tile on the electronic guide element 10 for having the selected channels in the focus area with the highlighted channel element 36 along with the associated information card element 24). Macrae does not explicitly teach while simultaneously moving the second channel information card downwardly into the selection focus area of the television. Ellis has an electronic program schedule system with product ordering capability which includes a data processor for receiving program schedule information for a plurality of programs (abstract) and teaches while simultaneously moving the second channel information card downwardly into the selection focus area of the television (paragraph 127 for having a multiple window or split screen operation for browsing channels and images or previews of channels simultaneously using a browse feature or directional moving of information). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the layout as taught by Ellis in the media method of Macrae in order to simultaneously display multiple broadcast programs on a single screen (Ellis, paragraph 127).

Regarding Claim 10, Macrae teaches wherein the first and second directional inputs are provided via a channel up/down button of an input device (paragraph 33 for having a remote control to move the cursor in an upward direction element 30 or a downward direction element 32 using arrows on the remote control device).

Regarding Claim 12, Macrae teaches wherein the second channel information card determined to display via the television is selected from a first group of channel numbers (figure 1A element 16 for displaying a second channel information card with a second advertisement with paragraph 40 for using a specialized guide for sports or a first group of channels associated with sports information).

Regarding Claim 14, Macrae teaches wherein the directional input is a leftward directional input or a rightward directional input (paragraph 33 for having a remote control with left and right arrows for input to highlight channel titles on the grid television guide), wherein the leftward directional input has a leftward direction (paragraph 33 for going in the left horizontal direction element 34), and the rightward directional input has a rightward direction (paragraph 33 for going in the right horizontal directions element 32).

Regarding Claim 15, Macrae teaches wherein the presentation layout is arranged to display a plurality of channel information cards that are overlaid on content playing via the television (paragraph 24 for having all the information elements of the screen of the television display being customizable with information card element 24 and two additional image locations elements 14, and 16 and paragraph 49 for the programming guide being translucent and overlaid on screen).

Regarding Claim 16, Macrae teaches, wherein the second directional input has a leftward direction (paragraph 33 for having a remote control with left and right arrows for input to highlight channel titles on the grid television guide), and wherein the leftward direction moves a selection focus area associated with the first channel information card to the second channel information card (paragraph 33 for having arrows for moving the information left and right using elements 32 and 34), where the second channel information card is arranged on the left of the first channel information card (paragraph 33 for using the right and left arrow keys for moving horizontally around the guide grid with means to view the future listings for the highlighted channels).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/036828

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding Claim 17, Macrae teaches a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor (paragraph 40 for having and interactive guide giving the user information on specialized channels and linking to external websites and storing information in a RAM or having instructions stored on a processor), perform the method comprising: receiving a first directional input via an input device associated with a television (paragraph 29 for using a remote control or user input device associated with the television and paragraph 33 for moving through the guide using arrows or a first directional input on arrow keys elements 28 and 30 for going up and down through the guide); determining, based on a first direction associated with the first directional input (paragraph 33 for moving the cursor on the guide using arrow keys elements 28 and 30 to highlight one of the nine program on the guide in the first vertical direction both upward and downwards), a display for at least one channel information card via the television (paragraph 35 for selecting the information key on the remote control to display an information box or channel information card for the given program and paragraph 36 for means to customize the location and size of the information on the screen); retrieving, from a memory, a first image that is representative of broadcast content playing on a first channel (figure 1A element 14 for having a grid guide with a first image of the stored freeze frame image, paragraph 58 for having the microprocessor having storing means to capture an image of Channel A or means to store an image and downloading the image or retrieving the image to access a website, with paragraph 78 for showing logos and graphics associated with channels), wherein the first image is retrieved from the memory in the absence of tuning to the first channel (figure 1A element 14 for having a grid guide with a first image of the stored freeze frame image, paragraph 58 for having the microprocessor having storing means to capture an image of Channel A or means to store an image and downloading the image or retrieving the image to access a website, with paragraph 78 for showing logos and graphics associated with channels); displaying, via the television, the first image on a first channel information (paragraph 59 for using the first image on the first channel A as part of an interactive television display and figure 1A element 14 for a first advertisement card with information for other channels with paragraph 78 for the advertisement have episode and airtime information for a channel or show along with logo or first image information); receiving a second directional input via the input device (paragraph 33 for moving the cursor on the guide using arrow keys elements 32 and 34 to highlight one of the nine program on the guide in the horizontal direction or a second direction); determining, based on a second direction associated with the second directional input (paragraph 29 for using a remote control input device and paragraph 33 for using the arrows or directional input to move the guide cursor in a horizontal direction to view future programs), a second channel information card to display via the television (figure 1A element 16 for having a second image location for putting information on the electronic guide element 10 with paragraph 58 for means to retrieve a stored image of a live broadcast to display in the ad location element 16), wherein the second channel information card includes a second image that is representative of broadcast content playing on a second channel (figure 1A element 16 for having means to display a second stored image on the guide display with paragraph 36 for the image having information on future programs and paragraph 79 for using graphic logos along with the channel program information), and wherein the second image is retrieved from the memory in the absence of tuning to the second channel (paragraph 59 for storing the freeze frame image in RAM and using it as part of an interactive display anytime the microprocessor is triggered, paragraph 78 for having graphics and logo information in a database therefore accessing without having to tune to a channel such as accessing the NBC logo); and displaying, via the television, the second image on the second channel information card (figure 1A element 16 for displaying location for the second stored image and paragraph 36 for watching the selected program). Macrae does not explicitly teach a presentation layout for each of the channel information cards. Ellis has an electronic program schedule system with product ordering capability which includes a data processor for receiving program schedule information for a plurality of programs (abstract) and teaches a presentation layout for each of the channel information cards (figure 11 for a presentation display for an individual channel card with an image and channel information and paragraph 127 for having a multiple window or split screen operation for browsing channels and images or previews of channels with paragraph 218 for scrolling through different movies and formats or using directional movement to select channels). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the layout as taught by Ellis in the media method of Macrae in order to simultaneously display multiple broadcast programs on a single screen (Ellis, paragraph 127).

Regarding Claim 18, Macrae wherein the method further comprises: detecting a selection input (paragraph 29 for using a remote control as a selection input device), wherein the selection input is at least one of a timed response to a channel navigation condition and an active selection provided via the input device, and wherein the selection input corresponds to a selection of a channel associated with a displayed channel information card (paragraph 33 for selecting a channel by highlighting the channel using the cursor and the arrows to locate the desired program with the active channel shown in the PIP window figure 1A element 12); and tuning, in response to detecting the selection input, the television to receive and display live broadcast content of the channel associated with the selected channel information card (paragraph 29 for pressing the select button on the remote control to watch a program in full screen mode).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/036828

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding Claim 19, Macrae teaches wherein the first image is an enlarged thumbnail graphic retrieved from an EPG (figure 1A element 10 for an electronic programming guide with channels element 52).

Regarding Claim 20, Macrae teaches wherein the memory is associated with the television (paragraph 78 for having a database or memory means for storing images such as logos in the IPG database with the IPG associated with the television), and wherein the first image is configured to indicate at least one of an availability of broadcast content preview, an availability of broadcast content, and an availability of a broadcast signal associated with the first channel (paragraph 78 for having a logo or graphics or first image that represents an episode of a program or the availability of a broadcast with content information such as the network, episode, and title; figure 1A element 16 for having means to display a second stored image on the guide display with paragraph 36 for the image having information on future programs).

Regarding Claim 21, Macrae teaches wherein the directional input is an upward directional input or a downward directional input (paragraph 33 for having a remote control to move the cursor in an upward direction element 30 or a downward direction element 32 using arrows on the remote control device), wherein the upward directional input has an upward direction, and the downward directional input has a downward direction (paragraph 33 for having a remote control to move the cursor in an upward direction element 30 or a downward direction element 32 using arrows on the remote control device covering both upward and downward directions).

Regarding Claim 22, Macrae teaches wherein the second directional input has an upward direction (paragraph 33 for having a remote control to move the cursor in an upward direction element 30 or a downward direction element 32 using arrows on the remote control device), and wherein the upward direction moves the first channel information card upwardly out of a selection focus area of the television (figure 1A element 52 for a grid tile on the electronic guide element 10 for having the selected channels in the focus area with the highlighted channel element 36 along with the associated information card element 24 and paragraph). Macrae does not explicitly teach while simultaneously moving the second channel information card upwardly into the selection focus area of the television. Ellis has an electronic program schedule system with product ordering capability which includes a data processor for receiving program schedule information for a plurality of programs (abstract) and teaches while simultaneously moving the second channel information card upwardly into the selection focus area of the television (paragraph 127 for having a multiple window or split screen operation for browsing channels and images or previews of channels simultaneously using a browse feature or directional moving of information). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the layout as taught by Ellis in the media method of Macrae in order to simultaneously display multiple broadcast programs on a single screen (Ellis, paragraph 127).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036828

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding Claim 23, Macrae discloses a system for navigating through broadcast content channels (paragraph 29 for the user using a television channel guide and selecting a program to watch with figure 1A element 10 for an electronic program guide), comprising: a television having a display and a tuner (figure 1A element 10 for a television displayer showing a TV program in the window in element 12, and paragraph 28 for having a tuner for the TV with the last channel displayed in the PIP window), wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (paragraph 28 for using the Tuner to display a television program or the last program watched in the PIP window of the guide and showing the currently telecast channel); an input device associated with the television (paragraph 29 for using a remote control device with a guide button to display the guide on the television); a memory (paragraph 40 for having and interactive guide giving the user information on specialized channels and linking to external websites and storing information in a RAM or having instructions stored on a processor); and a microprocessor operable to: receive a first directional input via the input device associated with the television (paragraph 29 for using a remote control or user input device associated with the television and paragraph 33 for moving through the guide using arrows or a first directional input on arrow keys elements 28 and 30 for going up and down through the guide); determine, based on a first direction associated with the first directional input (paragraph 33 for moving the cursor on the guide using arrow keys elements 28 and 30 to highlight one of the nine program on the guide in the first vertical direction both upward and downwards), a display for at least one channel information card via the display of the television (paragraph 35 for selecting the information key on the remote control to display an information box or channel information card for the given program and paragraph 36 for means to customize the location and size of the information on the screen); retrieve, from the memory, a first image that is representative of broadcast content playing on a first channel (figure 1A element 14 for having a grid guide with a first image of the stored freeze frame image, paragraph 58 for having the microprocessor having storing means to capture an image of Channel A or means to store an image and downloading the image or retrieving the image to access a website, with paragraph 78 for showing logos and graphics associated with channels), wherein the first image is retrieved from the memory in the absence of tuning to the first channel (figure 1A element 14 for having a grid guide with a first image of the stored freeze frame image, paragraph 58 for having the microprocessor having storing means to capture an image of Channel A or means to store an image and downloading the image or retrieving the image to access a website, with paragraph 78 for showing logos and graphics associated with channels); display, via the display of the television, the first image on a first channel information card (paragraph 59 for using the first image on the first channel A as part of an interactive television display and figure 1A element 14 for a first advertisement card with information for other channels with paragraph 78 for the advertisement have episode and airtime information for a channel or show along with logo or first image information); receive a second directional input via the input device (paragraph 33 for moving the cursor on the guide using arrow keys elements 32 and 34 to highlight one of the nine program on the guide in the horizontal direction or a second direction); determine, based on a second direction associated with the second directional input (paragraph 29 for using a remote control input device and paragraph 33 for using the arrows or directional input to move the guide cursor in a horizontal direction to view future programs), a second channel information card to display via the television (figure 1A element 16 for having a second image location for putting information on the electronic guide element 10 with paragraph 58 for means to retrieve a stored image of a live broadcast to display in the ad location element 16), wherein the second channel information card includes a second image that is representative of broadcast content playing on a second channel (figure 1A element 16 for having means to display a second stored image on the guide display with paragraph 36 for the image having information on future programs and paragraph 79 for using graphic logos along with the channel program information), and wherein the second image is retrieved from the memory in the absence of tuning to the second channel (paragraph 59 for storing the freeze frame image in RAM and using it as part of an interactive display anytime the microprocessor is triggered, paragraph 78 for having graphics and logo information in a database therefore accessing without having to tune to a channel such as accessing the NBC logo); and display, via the display of the television, the second image on the second channel information card (figure 1A element 16 for displaying location for the second stored image and paragraph 36 for watching the selected program). Macrae does not explicitly disclose a presentation layout for each of the channel information cards. Ellis has an electronic program schedule system with product ordering capability which includes a data processor for receiving program schedule information for a plurality of programs (abstract) and discloses a presentation layout for each of the channel information cards (figure 11 for a presentation display for an individual channel card with an image and channel information and paragraph 127 for having a multiple window or split screen operation for browsing channels and images or previews of channels with paragraph 218 for scrolling through different movies and formats or using directional movement to select channels). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the layout as taught by Ellis in the media system of Macrae in order to simultaneously display multiple broadcast programs on a single screen (Ellis, paragraph 127).

Regarding Claim 24, Macrae discloses wherein the input device includes at least one of a channel up button, a channel down button, a directional pad having an up, down, left, and right buttons, and wherein each of the buttons is configured to provide a directional input to the television (paragraph 33 for having a remote control or input device with four buttons including the up and down buttons 28 and 30, as well as the left and right horizontal buttons element 32 and 34).

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036828

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Claims 11 and 13 lack an inventive step under PCT Article 33(3) as being obvious over Macrae in view of Ellis, and further in view of Kim et al, hereinafter Kim.

Regarding Claim 11, Macrae and Ellis teach the method as shown above. Macrae and Ellis do not explicitly teach wherein the first and second directional inputs are provided via a directional pad of an input device. Kim has a method for controlling display of information (abstract) and discloses wherein the first and second directional inputs are provided via a directional pad of an input device (paragraph 305 for using a directional keypad with the remote controller). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the input pad as taught by Kim in the media system of Macrae in order to remotely control the display device (Kim, paragraph 305).

Regarding Claim 13, Macrae teaches wherein the second channel information card determined to display via the television (figure 1A element 16 for displaying a second channel information card with a second advertisement) is selected from a second group of channel numbers (paragraph 51 for displaying a channel or program from a second group of channels that are selected based on the user profile and giving the user the option to watch or record the channel), and wherein the second group of channel numbers is associated with at least one stored user preference (paragraph 51 for determining a group of channels associated with the user's profile or stored preferences).

Claims 1-24 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

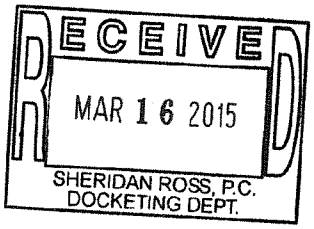
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



WILSON, Tadd, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-454-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055340	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

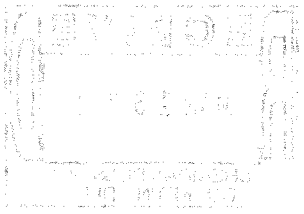
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Athina Nickitas-Etienne

e-mail: pt04.pct@wipo.int

VIZIO Ex. 1002, Page 3307 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-454-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055340	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☒	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Athina Nickitas-Etienne e-mail: pt04.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: TADD F. WILSON
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	10 FEB 2014
Applicant's or agent's file reference: 6583-454-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055340	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/173 (2014.01)
USPC - 725/27

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [X] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	28 January 2014	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055340

Box No. I Basis of this opinion

1. With regard to the **language,** this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

   ☐ on paper

   ☐ in electronic form

   b. (time)

   ☐ in the international application as filed

   ☐ together with the international application in electronic form

   ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055340

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the appicable time limit:

   ☐ paid additional fees

   ☐ paid additional fees under protest and, where applicable, the protest fee

   ☐ paid additional fees under protest but the applicable protest fee was not paid

   ☒ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

   ☐ complied with

   ☒ not complied with for the following reasons:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claims 1-3, drawn to a method of automatically determining a live television source for scanning channels.
Group II, claims 4-6, 13-15, drawn to a method of storing user received media content according to a user defined organization criteria.
Group III, claims 7-9, drawn to a method of using electronic programming guide (EPG) information to present information on content listings.
Group IV, claims 10-12, drawn to a method of searching content in the television.

The inventions listed as Groups I, II, III or IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention: automatically determining a live television source for scanning channels and providing a list of the scanned channels as claimed therein is not present in the invention of Groups II, III or IV. The special technical feature of the Group II invention: storing user received media content according to a user defined organization criteria and presenting to the user the stored media as claimed therein is not present in the invention of Groups I, III or IV. The special technical feature of the Group III invention: receiving electronic programming guide (EPG) information including a content listing including information about two or more items of content, receiving a user-defined attribute and storing the attribute with the EPG information in the content listing as claimed therein is not present in the invention of Groups I, II or IV. The special technical feature of the Group IV invention: receiving a search query for content that contains two or more terms, returning a result, parsing the terms, and storing the query and result as claimed therein is not present in the invention of Groups I, II or III.

Groups I, II, III and IV lack unity of invention because even though the inventions of these groups require the technical feature of a method/system/computer readable medium for storing instruction to manage data associated with an intelligent television, store social media data and content in a memory and provide a user interface on the intelligent television, this technical feature is not a special technical feature as it does not make a contribution over the prior art in view of US 2012/0210370 A1 (KIM et al) 16 August 2012 (16.08.2012).

US 2012/0210370 A1 to KIM et al. disclose a method/system/computer readable medium for storing instruction to manage data associated with an intelligent television (abstract, para 121, 124-125), store social media data and content in a memory (para 123, 132-133) and provide a user interface on the intelligent television (para 121, 340).

Since none of the special technical features of the Group I, II, III or IV inventions are found in more than one of the inventions, unity of invention is lacking.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

   ☐ all parts

   ☒ the parts relating to claims Nos. 1-3

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055340

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	2	YES
	Claims	1, 3	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-3	NO
Industrial applicability (IA)	Claims	1-3	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1, 3, lack novelty under PCT Article 33(2) as being anticipated by Moshiri et al., hereinafter referred to as Moshiri.

Regarding claims 1, 3, Moshiri discloses a method for managing data associated with an intelligent television, the method comprising [claim 1] (the fig.4 shows a method wherein the left most object 400 to be shortcut button to the home view screen and the object 406 is the Live TV button, upon selecting the 400 object the user interface immediately displays the home view shown in fig.3b, the fig.3b shows a GUI screen is a home view that refer to a currently displayed set of UI objects seen on a television 320, and displays applications 322 [intelligent television], "Live Tv", "Guide", "On Demand", "Photos", "Recorded" selectable by the user, abstract, para 0033-0035, 0048):
a computer readable medium having stored thereon processor executable instructions that cause a computing system to execute a method, the instructions comprising [claim 3] (the system includes a processor for executing sequences of instructions contained in a memory device, causes the processor to execute, para 0050):
automatically determining a live television source (the fig.4 shows the left most object 400 to be shortcut button to the home view screen and the object 406 is the Live TV button, upon selecting the 400 object the user interface immediately displays the home view shown in fig.3b, the fig.3b shows a GUI screen is a home view that refer to a currently displayed set of UI objects seen on a television 320, and displays applications 322, "Live Tv" [live television source], "Guide" [live television source], "On Demand", "Photos", "Recorded" selectable by the user [upon the user selects the home view tab which presents the user with the buttons "Live Tv" and "Guide" along with other contents, these buttons provide the user with access to live television content this requires/means the determination of live tv source "live tv" interpreted as automatically determining a live television source], para 0033-0035, 0041, 0048);
automatically scanning for one or more live television channels in the live television source (when the user selects the "guide" application of the fig.3b, it results in displaying an electronic program guide of fig.10, the EPG on the television screen provides a list of live TV channels to view [upon the selecting of the guide application the user is presented with live television channels this is interpreted as automatically scanning for one or more live television channels], para 0048; fig.4 shows the object 406 displayed which is a Live TV button, upon actuating the object 406 it results in the user interface to immediately display live TV UI view [immediately displaying a live TV channel feed requires/means the determination of and automatically scanning for a live television channel/feed] that enables a user to quickly view television programs, the live TV UI view/feed 700 is shown in fig.7, with a channel section overlay 800 of fig.8 presented which is used to change channels, para 0041);
and providing a list of the live television channels (when the user selects the "guide" application of the fig.3b, it results in displaying an electronic program guide of fig.10, on the television screen and provides a list of live TV channels to view, para 0048).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055340

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Claim 2 lacks an inventive step under PCT Article 33(3) as being obvious over Moshiri in view of Kim et al., hereinafter referred to as Kim.

Regarding claim 2, Moshiri discloses an intelligent television system comprising (fig.3b shows a system which includes a GUI screen is a home view that refer to a currently displayed set of UI objects seen on a television 320, and displays applications 322 [intelligent television], "Live Tv", "Guide", "On Demand", "Photos", "Recorded" selectable by the user, abstract, para 0033-0035, 0048):
a memory and a processor in communication with the memory, the processor operable to: execute a live television source plug-in operable to (the system includes a processor for executing sequences of instructions contained in a memory device, causes the processor to execute, para 0050; when the user selects the "guide" application of the fig.3b, it results in displaying an electronic program guide of fig.10, on the television screen and provides a list of live TV channels to view [execute a live television source plug-in], para 0048):
automatically determine a live television source (the fig.4 shows the left most object 400 to be shortcut button to the home view screen and the object 406 is the Live TV button, upon selecting the 400 object the user interface immediately displays [automatically determining] the home view shown in fig.3b, the fig.3b shows a GUI screen is a home view that refer to a currently displayed set of UI objects seen on a television 320, and displays applications 322, "Live Tv" [live television source], "Guide" [live television source], "On Demand", "Photos", "Recorded" selectable by the user, para 0033-0035, 0048); automatically scan for one or more live television channels in the live television source (fig.4 shows the object 406 displayed which is a Live TV button, upon actuating the object 406 it results in the user interface to immediately display live TV UI view that enables a user to quickly view television programs, the live TV UI view/feed 700 is shown in fig.7 [automatically scanning a live television channel], with a channel section overlay 800 of fig.8 presented which is used to change channels, para 0041; when the user selects the "guide" application of the fig.3b, it results in displaying an electronic program guide of fig.10, on the television screen and provides a list of live TV channels to view [automatically scanning for one or more live television channels], para 0048);
and execute a user interface application in communication with the live television source plug-in, the user interface application operable to provide a list of the live television channels (fig.4 shows the object/applications 406 displayed which is a Live TV button, upon actuating the object 406 it results in the user interface to immediately display live TV UI view that enables a user to quickly view live television programs, the live TV UI view/feed 700 is shown in fig.7 [actuating the Live Tv icon 406 provides the users with live television channels, the application 406 is interpreted as a live television source plug-in with reference to the Applicant's Specs para 316, 317], with a channel section overlay 800 of fig.8 presented which is used to change channels, para 0041; when the user selects the "guide" application of the fig.3b, it results in displaying an electronic program guide [a user interface] of fig.10, on the television screen and provides a list of live TV channels to view [execute a user interface in communication with a live television source plug-in], para 0048), but lacks the teaching of a memory operable to store social media data.
Kim is in the field of a multi-functional display having a channel scan interface accessing the social network service of individuals (abstract) and teaches a memory operable to store social media data (figs.1 & 3 shows that the electronic device 300 functions as a first broadcasts receiver 100, which is a television, and further includes a storage unit 345, para 0131, 0149, 150; a Social network service (SNS) provides online social network among different users for media sharing and fig.85 shows the GUI 8500 includes a list of SNS sites 8511 to 8519 previously stored in the storage unit 345 [store social media data], para 0123, 0626; a storage unit is configured to store SNS account assigned to at least one channel number, para 0132, 0883). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Kim to incorporate a memory operable to store social media data into the invention of Moshiri. The motivation would have been to provide the users with an optimized integration of social network service with television channels (see Kim para 0133).

Claims 1-3 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

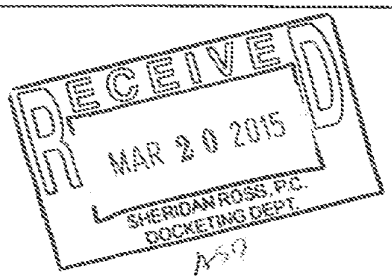
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



PEARSON, Kendria, E.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*
26 February 2015 (26.02.2015)

Applicant's or agent's file reference
6583-463-PCT

IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055551	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Yukari Nakamura

e-mail: pt07.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-463-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055551	International filing date *(day/month/year)* 19 August 2013 (19.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Yukari Nakamura
Facsimile No. +41 22 338 82 70	e-mail: pt07.pct@wipo.int

Form PCT/IB/373 (January 2004)

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Kendria E. Pearson
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	06 DEC 2013
Applicant's or agent's file reference 6583-463-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55551	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2013.01)
USPC - 348/564

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to th IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	12 November 2013 (12.11.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55551

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	NONE	YES
	Claims	1-20	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by US 2012/0174039 A1 to Rhoads et al. (hereinafter 'Rhoads').

As per claim 1, Rhoads discloses a method, comprising: presenting a first content via a display of an intelligent television (TV) (content provided to HDTV (intelligent television) or 3D display TV, paragraph [0053]), wherein the first content is presented to a first portion and a second portion of the display (different type of contents are displayed on the HDTV screen and are presented as different regions such a first region 102 and a second region 126, figure 1 and paragraphs [0028]-[0035]); receiving a menu input at the intelligent TV (the HDTV receives a menu option as an input, paragraphs [0028] and [0053]), wherein the menu input corresponds to a user interface (a menu option corresponding to a user interface, paragraph [0028]); determining, by a processor associated with the intelligent TV and in response to receiving the menu input, menu content that corresponds to at least one of the first content and menu input received (a microprocessor is a cause of interaction between a menu on the HDTV and the user interface, paragraphs [0028], [0049] and [0053]); retrieving, from at least one source, the menu content (accessing media content source, paragraph [0056]); and presenting, via the display, the menu content to the second portion of the display (presenting menu content on a second region 126, paragraph [0035]), wherein the second portion of the display is associated with a menu (the second region 126 displays menu, paragraphs [0028] and [0035]), wherein the first content is shifted such that the first content is presented to the first portion of the display (the first region 102 is isolated or stands alone which contain a unique menu, paragraphs [0028]-[0035]), and wherein the first portion and the second portion of the display do not substantially overlap (the first region 102 and the second region 126 are separated, paragraphs [0028]-[0035]).

As per claim 9, Rhoads discloses a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor (a memory stores instructions executed by a processor, paragraphs [0049] and [0051]), perform the method comprising: presenting a first content via a display of an intelligent television (TV) (content provided to HDTV (intelligent television) or 3D display TV, paragraph [0053]), wherein the first content is presented to a first portion and a second portion of the display (different type of contents are displayed on the HDTV screen and are presented as different regions such a first region 102 and a second region 126, figure 1 and paragraphs [0028]-[0035]); receiving a menu input at the intelligent TV (the HDTV receives a menu option as an input, paragraphs [0028] and [0053]), wherein the menu input corresponds to a user interface (a menu option corresponding to a user interface, paragraph [0028]); determining, by a processor associated with the intelligent TV and in response to receiving the menu input, menu content that corresponds to at least one of the first content and menu input received (a microprocessor is a cause of interaction between a menu on the HDTV and the user interface, paragraphs [0028], [0049] and [0053]); retrieving, from at least one source, the menu content (accessing media content source, paragraph [0056]); and presenting, via the display, the menu content to the second portion of the display (presenting menu content on a second region 126, paragraph [0035]), wherein the second portion of the display is associated with a menu (the second region 126 displays menu, paragraphs [0028] and [0035]), wherein the first content is shifted such that the first content is presented to the first portion of the display (the first region 102 is isolated or stands alone which contain a unique menu, paragraphs [0028]-[0035]), and wherein the first portion and the second portion of the display do not substantially overlap (the first region 102 and the second region 126 are separated, paragraphs [0028]-[0035]).

As per claim 18, Rhoads discloses a system (a system, paragraphs [0023] and [0024]), comprising: an intelligent television (TV) having a display and a tuner (a HDTV having a tuner and a display, paragraphs [0052], [0053] and [0067]), wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (a tuner receive analog signals and convert analog signals to digital signals for displaying, paragraphs [0052] and [0067]); an input device associated with the intelligent TV (an input device 310 associated with a display 312, paragraph [0053]); a memory (a memory, paragraphs [0049] and [0051]); and a microprocessor operable to: present a first content via a display of an intelligent television (TV) (a microprocessor provided content to HDTV (intelligent television) or 3D display TV, paragraphs [0049] and [0053]), wherein the first content is presented to a first portion and a second portion of the display (different type of contents are displayed on the HDTV screen and are presented as different regions such a first region 102 and a second region 126, figure 1 and paragraphs [0028]-[0035]); receive a menu input at the intelligent TV (the HDTV receives a menu option as an input, paragraphs [0028] and [0053]), wherein the menu input corresponds to a user interface (a menu option corresponding to a user interface, paragraph [0028]); determine, by a processor associated with the intelligent TV and in response to receiving the menu input, menu content that corresponds to at least one of the first content and menu input received (a microprocessor is a cause of interaction between a menu on the HDTV and the user interface, paragraphs [0028], [0049] and [0053]); retrieve, from at least one source, the menu content (retrieve from a source information to generate the guidance display (menu), paragraph [0056]); and present, via the display, the menu content to the second portion of the display (presenting menu content on a second region 126, paragraph [0035]), wherein the second portion of the display is associated with a menu (the second region 126 displays menu, paragraphs [0028] and [0035]),

-***-Continued Within the Next Supplemental Box-***-

VIZIO Ex. 1002, Page 3319 of 3573
VIZIO v. MMT, IPR2024-00722

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No
PCT/US13/55551

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:
-***-Continued from Previous Supplemental Box-***-

wherein the first content is shifted such that the first content is presented to the first portion of the display (the first region 102 is isolated or stands alone which contain a unique menu, paragraphs [0028]-[0035]), and wherein the first portion and the second portion of the display do not substantially overlap (the first region 102 and the second region 126 are separated, paragraphs [0028]-[0035]).

As per claims 2 and 10, Rhoads further discloses wherein determining the menu content of the method further comprises: referring to rules stored in a memory (a boot-up routine and other instructions (rules) stored in a memory), paragraph [0051]), wherein the rules include one or more menu fields mapped to at least one menu content type (menu identifiers (fields) specifying menu type, paragraph [0121]); comparing a menu content type associated with the first content with the one or more mapped menu fields (comparing selected media asset in a menu with the media identifiers (fields), paragraph [0148]); determining select menu fields from the one or more mapped menu fields (selecting media assets that are compatible to media identifiers, paragraphs [0148] and [0149]); and including the select menu fields in the menu content for retrieval (retrieve the media identifiers associated with the selected media asset, paragraph [0148]).

As per claims 3, 11 and 19, Rhoads further discloses receiving a menu selection at the intelligent TV (receiving a selection of menus on a HDTV, paragraphs [0028], [0035], [0043], [0053] and [0121]), wherein the menu selection corresponds to a selected content (a menu to select channels that display contents, paragraphs [0028], [0035] and [0121]); determine the selected content based on the menu selection (displaying (selecting) a menu to select channels that display contents, paragraphs [0028], [0035] and [0121]); and providing a focus on the selected content in the user interface (scroll through a menu channels in the user interface, [0028], [0035], [0121] and [0142]).

As per claims 4 and 16, Rhoads further discloses wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (a memory stores media asset associated with media source, paragraphs [0093] and [0137]).

As per claims 5 and 12, Rhoads further discloses receiving a menu selection at the intelligent TV (receiving a selection of menus on a HDTV, paragraphs [0028], [0035], [0043], [0053] and [0121]), wherein the menu selection corresponds to a selected content type (a menu to select channels that display different types of contents, paragraphs [0028], [0035] and [0121]); determining the selected content type based on the menu selection (displaying (selecting) a menu to select channels that display different types of contents, paragraphs [0028], [0035] and [0121]); determining which content of the first content is the selected content type (one typical type of media guidance application is selected as an interactive television program guide, paragraph [0025]); and providing a user interface with content of the selected content type highlighted in the first portion of the display (a user interface in the screen of the HDTV where a menu 102 is displayed, paragraphs [0028]-[0035] and [0053]).

As per claims 6 and 13, Rhoads further discloses receiving a second selection (receiving a second media navigation cue to be selected, paragraphs [0038], [0040] and [0059]); and rearranging content in at least one of the first portion of the display and the second portion of the display (arranging the media assets on the first region 102 and the second region 122, paragraphs [0027]-[0035], [0088] and [0139]); and presenting, via the display, the rearranged content (displaying the arranged media assets on a screen, paragraphs [0029] and [0036]).

As per claims 7 and 14, Rhoads further discloses wherein a size of the first portion of the display is larger than a size of the second portion of the display (on a display screen the region 102 is larger in size than the region 122, figure 1 and paragraphs [0028]-[0035]).

As per claims 8, 15 and 20, Rhoads further discloses receiving a menu selection at the intelligent TV (receiving a selection of menus on a HDTV, paragraphs [0028], [0035], [0043], [0053] and [0121]), wherein the menu selection corresponds to a specific selected content (a menu to select channels that display certain types of contents, paragraphs [0028], [0035] and [0121]); determining the metadata of the specific selected content (determining certain media (content), wherein the media can be distributed by a metadata source, paragraphs [0005] and [0139]); retrieving a secondary content based on the metadata of the specific selected content (acquire certain media based on media distributed by a metadata source, paragraphs [0005] and [0139]); providing, via the user interface, the secondary content within the second portion of the display (providing media on a user interface to be displayed s menu list on a region of display screen such as region 122, paragraphs [0028]-[0035]).

As per claim 17, Rhoads further discloses wherein the menu input is provided via an input device associated with the intelligent TV (the HDTV receives a menu option as an input, paragraphs [0028] and [0053]).

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

PEARSON, Kendria, E.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-464-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055592	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Kihwan Moon

e-mail: pt01.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-464-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055592	International filing date *(day/month/year)* 19 August 2013 (19.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 9 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Kendria E. Pearson
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	10 MAR 2014
Applicant's or agent's file reference 6583-464-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55592	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 3/0481 (2014.01)
USPC - 715/848

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	05 February 2014 (05.02.2014)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55592

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55592

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	2-20	YES
	Claims	1	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1 lacks novelty under PCT Article 33(2) as being anticipated by US 2011/0131506 A1 (Calissendorff).

As to claim1, Calissendorff discloses a method for providing multiple types of user interfaces in an intelligent television (a method to dynamically adapt a user interface to the available context in a smart TV (method for providing multiple types of user interfaces in an intelligent television), paragraph [0025], [0120]), the method comprising: receiving a selection for the user interface (the presentation model locates the command associated with the action (receiving a selection for the user interface), paragraph [0077]), wherein the user interface provides content (the presentation model uses the available content to generate the interface for the user (wherein the user interface provides content), paragraph [0091]); determining a type of content to provide (content is determined by which available items fulfill the criteria of a presentation group (determining a type of content to provide), paragraph [0047]); determining a type of user interface based on the type of content to provide, wherein a first type of content corresponds to a first user interface (available content with the known context is used to generate the user interface (determining a type of user interface based on the type of content to provide, wherein the first type of content corresponds to a first user interface), paragraph [0072]), a second type of content corresponds to a second user interface (when a change in context is detected, the available content is used to generate a new user interface (a second type of content corresponds to a second user interface), paragraphs [0110], [0112]), and a third type of content corresponds to a third user interface (when the user moves into a different context B or C, the interface will update to the new context (and a third type of content corresponds to a third user interface), figures 5a-5d, paragraph [0058]); providing the first user interface for the first type of content (presenting the user interface of content (providing the first user interface for the first type of content), paragraph [0073]); providing the second user interface for the second type of content (presenting the user interface of the new content (providing the second user interface for the second type of content), paragraph [0113]); and providing the third user interface for the third type of content (the presentation model ensures that each item is presented (providing the third user interface for the third type of content), paragraph [0032]).

Claims 2, 17 and 20 lack an inventive step under PCT Article 33(3) as being obvious over Calissendorff in view of US 2011/0252466 A1 to Jeong et al. (hereinafter "Jeong").

As to claim 2, Calissendorff discloses the method as defined in claim 1. However, Calissendorff fails to disclose a method wherein the first type of content is for a selection main screen with a limited amount of content. Jeong discloses a method wherein the first type of content is for a selection main screen with a limited amount of content (the home screen (selection main screen) may further include an application menu with at least one application that can be executed (wherein the first type of content is for a selection main screen with a limited amount of content), paragraph [0145]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the first type of content is for a selection main screen with a limited amount of content, as taught by Jeong, for the benefit of presenting a main screen that is simple to navigate.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55592

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Box V: Citations and Explanations-***-

As to claim 17, Calissendorff discloses a method comprising: receive a selection for the user interface (the presentation model locates the command associated with the action (receive a selection for the user interface), paragraph [0077]), wherein the user interface provides content (the presentation model uses the available content to generate the interface for the user (wherein the user interface provides content), paragraph [0091]); determine a type of content to provide (content is determined by which available items fulfill the criteria of a presentation group (determine a type of content to provide), paragraph [0047]); determine a type of user interface based on the type of content to provide, wherein a first type of content corresponds to a first user interface (available content with the known context is used to generate the user interface (determine a type of user interface based on the type of content to provide, wherein the first type of content corresponds to a first user interface), paragraph [0072]), a second type of content corresponds to a second user interface (when a change in context is detected, the available content is used to generate a new user interface (a second type of content corresponds to a second user interface), paragraphs [0110], [0112]), and a third type of content corresponds to a third user interface (when the user moves into a different context B or C, the interface will update to the new context (and a third type of content corresponds to a third user interface), figures 5a-5d, paragraph [0058]); provide the first user interface for the first type of content (presenting the user interface of content (provide the first user interface for the first type of content), paragraph [0073]); provide the second user interface for the second type of content (presenting the user interface of the new content (provide the second user interface for the second type of content), paragraph [0113]); provide the third user interface for the third type of content (the presentation model ensures that each item is presented (provide the third user interface for the third type of content), paragraph [0032]). However, Calissendorff fails to disclose a method comprising: computer readable medium having stored thereon processor executable instructions that cause a computing system to execute a method, the instructions comprising: instructions to. Jeong discloses a method comprising: computer readable medium having stored thereon processor executable instructions that cause a computing system to execute a method, the instructions comprising: instructions to (a non-transitory computer readable medium including instructions configured to perform the display method (computer readable medium having stored thereon processor executable instructions that cause a computing system to execute a method, the instructions comprising: instructions to), claim 20). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include computer readable medium having stored thereon processor executable instructions that cause a computing system to execute a method, the instructions comprising: instructions to, as taught by Jeong, for the benefit of executing instructions to perform the method.

As to claim 20, Calissendorff and Jeong disclose the computer readable medium as defined in claim 17. Calissendorff further discloses the computer readable medium wherein the third type of content is for a collection of content, and wherein the third user interface is for a linear view (the presentation group (wherein the third type of content is for a collection of content) is in a linear view (wherein the third user interface is for a linear view), figure 3d).

Claims 12 and 16 lack an inventive step under PCT Article 33(3) as being obvious over Calissendorff in view of US 2010/0241962 A1 to Peterson et al. (hereinafter "Peterson").

As to claim 12, Calissendorff discloses an intelligent television system comprising (smart TV controller (intelligent television system), paragraph [0114]): execute a statistics subservice (the presentation model includes services to present content to users based on user preferences (execute a statistics subservice), paragraph [0033]); execute an user interface application (dynamically adapt a user interface to the available context (execute an user interface application), paragraph [0120]): receive a selection for the user interface (the presentation model locates the command associated with the action (receive a selection for the user interface), paragraph [0077]), wherein the user interface provides content (the presentation model uses the available content to generate the interface for the user (wherein the user interface provides content), paragraph [0091]); determine a type of content to provide (content is determined by which available items fulfill the criteria of a presentation group (determine a type of content to provide), paragraph [0047]); determine a type of user interface based on the type of content to provide, wherein a first type of content corresponds to a first user interface (available content with the known context is used to generate the user interface (determine a type of user interface based on the type of content to provide, wherein the first type of content corresponds to a first user interface), paragraph [0072]), a second type of content corresponds to a second user interface (when a change in context is detected, the available content is used to generate a new user interface (a second type of content corresponds to a second user interface), paragraphs [0110], [0112]), and a third type of content corresponds to a third user interface (when the user moves into a different context B or C, the interface will update to the new context (and a third type of content corresponds to a third user interface), figures 5a-5d, paragraph [0058]); provide the first user interface for the first type of content (presenting the user interface of content (provide the first user interface for the first type of content), paragraph [0073]); provide the second user interface for the second type of content (presenting the user interface of the new content (provide the second user interface for the second type of content), paragraph [0113]); and provide the third user interface for the third type of content (the presentation model ensures that each item is presented (provide the third user interface for the third type of content), paragraph [0032]). However, Calissendorff fails to disclose a system comprising: a memory operable to store social media data; a processor in communication with the memory, the processor operable to execute a statistics subservice operable to: execute an user interface application operable to. Peterson discloses a system comprising: a memory operable to store social media data (memory can store supplemental content such as social network data (a memory operable to store social media data), paragraphs [0037], [0039]); a processor in communication with the memory, the processor operable to: execute an user interface application operable to (one or more processors with a memory element (a processor in communication with the memory), the processor executes the media delivery system (execute an user interface application operable to), figure 7, paragraph [0060]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Calissendorff to include a memory operable to store social media data; a processor in communication with the memory, the processor operable to execute a statistics subservice operable to: execute an user interface application operable to, as taught by Peterson, for the benefit of using stored social media data to perform metrics for organizing content display.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55592

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claim 16, Calissendorff and Peterson disclose the intelligent television system as defined in claim 12. Calissendorff further discloses a system wherein the third type of content is for a collection of content, and wherein the third user interface is for a linear view (the presentation group (wherein the third type of content is for a collection of content) is in a linear view (wherein the third user interface is for a linear view), figure 3d).

Claims 3-5 and 18 lack an inventive step under PCT Article 33(3) as being obvious over Calissendorff in view of Jeong, and further in view of US 2010/0241962 A1 to Peterson et al. (hereinafter "Peterson").

As to claim 3, Calissendorff and Jeong disclose the method as defined in claim 2. However, Calissendorff fails to disclose a method wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view. Peterson discloses a method wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view (the means of displaying can be presented as a Fibonacci spiral (wherein the first user interface is a Fibonacci view), paragraph [0043]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view, as taught by Peterson, for the benefit of presenting a Fibonacci view giving the user more selectable options.

As to claim 4, the combination of Calissendorff, Jeong, and Peterson disclose the method as defined in claim 3. However, Calissendorff fails to disclose a method wherein the Fibonacci view provides selectable content thumbnails arranged in a Fibonacci spiral. Peterson discloses a method wherein the Fibonacci view provides selectable content thumbnails arranged in a Fibonacci spiral (content thumbnails can be presented in a Fibonacci spiral (the Fibonacci view provides selectable content thumbnails arranged in a Fibonacci spiral), paragraph [0011]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the Fibonacci view provides selectable content thumbnails arranged in a Fibonacci spiral, as taught by Peterson, for the benefit of presenting a Fibonacci view giving the user more selectable options.

As to claim 5, the combination of Calissendorff, Jeong, and Peterson disclose the method as defined in claim 4. However, Calissendorff fails to disclose a method wherein the thumbnails are arranged in the Fibonacci spiral based on a characteristic of the content associated with the thumbnail, and wherein the characteristic is one or more of an amount of content, a most viewed statistic, a newest statistic, or a most favorite statistic. Peterson discloses a method wherein the thumbnails are arranged in a Fibonacci spiral (thumbnails can be presented in a Fibonacci spiral (wherein thumbnails are arranged in a Fibonacci spiral), paragraph [0011]). Further, Jeong discloses a method wherein the arrangement is based on a characteristic of the content associated with the thumbnail (the application menu of thumbnails may be arranged based on characteristics (wherein the arrangement is based on a characteristic of the content associated with the thumbnail), paragraphs [0163], [0444]), and wherein the characteristic is a most favorite statistic (thumbnails may be arranged by applications most frequently used by the user (wherein the characteristic is a most favorite statistic), paragraph [0444]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the thumbnails are arranged in a Fibonacci spiral, as taught by Peterson, for the benefit of giving the user more selectable options. Further, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the characteristic is a most favorite statistic, as taught by Jeong, for the benefit of presenting thumbnails in a preferred order.

As to claim 18, Calissendorff and Jeong disclose the computer readable medium as defined in claim 17. However, Calissendorff fails to disclose a computer readable medium wherein first type of content is for a selection main screen with a limited amount of content, and wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view. Jeong discloses a computer readable medium wherein first type of content is for a selection main screen with a limited amount of content (the home screen (selection main screen) may further include an application menu with at least one application that can be executed (wherein the first type of content is for a selection main screen with a limited amount of content), paragraph [0145]). Further, Peterson discloses a computer readable medium wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view (the means of displaying can be presented as a Fibonacci spiral (wherein the first user interface is a Fibonacci view), paragraph [0043]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Calissendorff to include wherein first type of content is for a selection main screen with a limited amount of content, as taught by Jeong, for the benefit of presenting a main screen that is simple for the user to navigate. Further, It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Calissendorff to include wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view, as taught by Peterson, for the benefit of using a Fibonacci view to present more selectable options to the user.

Claims 6-11 lack an inventive step under PCT Article 33(3) as being obvious over Calissendorff in view of US 2005/0091596 A1 to Anthony et al. (hereinafter "Anthony").

As to claim 6, Calissendorff discloses the method as defined in claim 1. However, Calissendorff fails to disclose a method wherein the second type of content is for content associated with time. Anthony discloses a method wherein the second type of content is for content associated with time (the area displayed to the user is enough in detail for the user to discern the timeline content (wherein the second type of content is for content associated with time), paragraph [0063]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the second type of content is for content associated with time, as taught by Anthony, for the benefit of using a time parameter for organizing content.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55592

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claim 7, Calissendorff and Anthony disclose the method as defined in claim 6. However, Calissendorff fails to disclose a method wherein the second user interface is a timeline view. Anthony discloses a method wherein the second user interface is a timeline view (a dynamic timeline view allows a user to view a set of items arranged chronologically (is a timeline view) and presented in a GUI environment (wherein the second user interface), paragraph [0043]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the second user interface is a timeline view, as taught by Anthony, for the benefit of presenting the content in a timeline view to a user.

As to claim 8, Calissendorff and Anthony disclose the method as defined in claim 7. However, Calissendorff fails to disclose a method wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view. Anthony discloses a method wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view (the timeline view provides thumbnail icons that will open when the user double clicks (wherein the timeline view provides selectable content thumbnails) arranged in a chronological manner (arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view), paragraphs [0044], [0046], [0047]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view, as taught by Anthony, for the benefit of presenting a chronological view of content to a user.

As to claim 9, Calissendorff and Anthony disclose the method as defined in claim 8. However, Calissendorff fails to disclose a method wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated. Anthony discloses a method wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated (items may be grouped in chronological order (the timeline view includes a demarcation) in a logical timeline that may include various time intervals (to indicated a change in date to which the content is associated), paragraph [0042]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated, as taught by Anthony, for the benefit of showing a user interface that clearly indicates a date change of a timeline view.

As to claim 10, Calissendorff discloses the method as defined in claim 1. However, Calissendorff fails to disclose a method wherein the third type of content is for a collection of content. Anthony discloses a method wherein the third type of content is for a collection of content (items may be stored in logical groupings such as virtual folders or stacks (wherein the third type of content is for a collection of content), paragraph [0047]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the third type of content is for a collection of content, as taught by Anthony, for the benefit of grouping content for easier viewing for the user.

As to claim 11, Calissendorff and Anthony disclose the method as defined in claim 10. Calisendorff further discloses a method wherein the third user interface is for a linear view (the presentation group is in a linear view (wherein the third user interface is for a linear view), figure 3d). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Calissendorff to include wherein the third user interface is for a linear view, as taught by Anthony, for the benefit of presenting a linear view in a user interface.

Claims 13-14 lack an inventive step under PCT Article 33(3) as being obvious over Calissendorff in view of Peterson, and further in view of Jeong.

As to claim 13, Calissendorff and Peterson disclose the intelligent television system as defined in claim 12. However, Calissendorff fails to disclose a system wherein first type of content is for a selection main screen with a limited amount of content, and wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view. Jeong discloses a system wherein first type of content is for a selection main screen with a limited amount of content (the home screen (selection main screen) may further include an application menu with at least one application that can be executed (wherein the first type of content is for a selection main screen with a limited amount of content), paragraph [0145]). Further, Peterson discloses a system wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view (the means of displaying can be presented as a Fibonacci spiral (wherein the first user interface is a Fibonacci view), paragraph [0043]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Calissendorff to include wherein first type of content is for a selection main screen with a limited amount of content, as taught by Jeong, for the benefit of presenting a main screen that is simple for the user to navigate. Further, It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Calissendorff to include wherein the first user interface is for at least one of a grid view, a Fibonacci view, and a cluster view, as taught by Peterson, for the benefit of using a Fibonacci view to present more selectable options to the user.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55592

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claim 14, the combination of Calissendorff, Jeong, and Peterson disclose the intelligent television system as defined in claim 13. However, Calissendorff fails to disclose a system wherein the first user interface is a Fibonacci view, wherein the Fibonacci view provides selectable content thumbnails arranged in a Fibonacci spiral, wherein the thumbnails are arranged in the Fibonacci spiral based on a characteristic of the content associated with the thumbnail, and wherein the characteristic is one or more of an amount of content, a most viewed statistic, a newest statistic, or a most favorite statistic. Peterson discloses a system wherein the first user interface is a Fibonacci view (content can be presented in a Fibonacci spiral (wherein the first user interface is a Fibonacci view), paragraph [0011]), wherein the Fibonacci view provides selectable content thumbnails arranged in a Fibonacci spiral (content (thumbnails can be presented in a Fibonacci spiral (the Fibonacci view provides selectable content thumbnails arranged in a Fibonacci spiral), paragraph [0011]), wherein the thumbnails are arranged in the Fibonacci spiral (thumbnails can be presented in a Fibonacci spiral (wherein the thumbnails are arranged in a Fibonacci spiral), paragraph [0011]). Further, Jeong discloses a system wherein the arrangement is based on a characteristic of the content associated with the thumbnail (the application menu of thumbnails may be arranged based on characteristics (wherein the arrangement is based on a characteristic of the content associated with the thumbnail (paragraphs [0163], [0444]), and wherein the characteristic is a most favorite statistic (thumbnails may be arranged by applications most frequently used by the user (wherein the characteristic is a most favorite statistic), paragraph [0444]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Calissendorff to include wherein the first user interface is a Fibonacci view, wherein the Fibonacci view provides selectable content thumbnails arranged in a Fibonacci spiral, wherein the thumbnails are arranged in the Fibonacci spiral, as taught by Peterson, for the benefit of presenting thumbnails using a Fibonacci spiral to the user. Further, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Calissendorff to include system wherein the arrangement is based on a characteristic of the content associated with the thumbnail, and wherein the characteristic is a most favorite statistic as taught by Jeong, for the benefit of presenting thumbnails to a user based on favorites.

Claim 15 lacks an inventive step under PCT Article 33(3) as being obvious over Calissendorff in view of Peterson, and further in view of Anthony.

As to claim 15, Calissendorff and Peterson disclose the intelligent television system as defined in claim 12. However, Calissendorff fails to disclose a system wherein the second type of content is for content associated with time, wherein the second user interface is a timeline view, wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view, and wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated. Anthony discloses a system wherein the second type of content is for content associated with time (the area displayed to the user is enough in detail for the user to discern the timeline content (wherein the second type of content is for content associated with time), paragraph [0063]), wherein the second user interface is a timeline view (a dynamic timeline view allows a user to view a set of items arranged chronologically (is a timeline view) and presented in a GUI environment (wherein the second user interface), paragraph [0043]), wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view (the timeline view provides thumbnail icons that will open when the user double clicks (wherein the timeline view provides selectable content thumbnails) arranged in a chronological manner (arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view), paragraphs [0044], [0046], [0047]), and wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated (items may be grouped in chronological order (the timeline view includes a demarcation) in a logical timeline that may include various time intervals (to indicated a change in date to which the content is associated), paragraph [0042]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Calisssendorff to include wherein the second type of content is for content associated with time, wherein the second user interface is a timeline view, wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view, and wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated, as taught by Anthony, for the benefit of organizing the display of content in a timeline view.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55592

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
-***-Continued from Previous Supplemental Box-***-

Claim 19 lacks an inventive step under PCT Article 33(3) as being obvious over Calissendorff in view of Jeong, and further in view of Anthony.

As to claim 19, Calissendorff and Jeong disclose the computer readable medium as defined in claim 17. However, Calissendorff fails to disclose the computer readable medium wherein the second type of content is for content associated with time, wherein the second user interface is a timeline view, wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view, and wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated. Anthony discloses a computer readable medium (computer readable medium, claim 21) wherein the second type of content is for content associated with time (the area displayed to the user is enough in detail for the user to discern the timeline content (wherein the second type of content is for content associated with time), paragraph [0063]), wherein the second user interface is a timeline view (a dynamic timeline view allows a user to view a set of items arranged chronologically (is a timeline view) and presented in a GUI environment (wherein the second user interface), paragraph [0043]), wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view the timeline view provides thumbnail icons that will open when the user double clicks (wherein the timeline view provides selectable content thumbnails) arranged in a chronological manner (arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view), paragraphs [0044], [0046], [0047]), and wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated (items may be grouped in chronological order (the timeline view includes a demarcation) in a logical timeline that may include various time intervals (to indicated a change in date to which the content is associated), paragraph [0042]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the computer readable medium of Calissendorff to include wherein the second type of content is for content associated with time, wherein the second user interface is a timeline view, wherein the timeline view provides selectable content thumbnails arranged in timeline from oldest content at a first side of the timeline view to newest content at a second side of the timeline view, and wherein the timeline view includes a demarcation to indicate a change in date to which the content is associated, as taught by Anthony, for the benefit of performing the timeline view operations using computer readable medium.

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

REINHARDT, Dean, N.
SHERIDAN ROSS P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-469-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/036819	16 April 2013 (16.04.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Philippe Bécamel

e-mail: pt03.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-469-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/036819	International filing date *(day/month/year)* 16 April 2013 (16.04.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: DEAN N. REINHARDT
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	17 JUN 2013

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-469-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/036819	16 April 2013	14 June 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04H 60/29 (2013.01)
USPC - 725/14

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	04 June 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036819

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036819

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-17	YES
	Claims	18-20	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 18-20 lack novelty under PCT Article 33(2) as being anticipated by Peterson.

Regarding claim 18, Peterson teaches a method (systems and methods for simplifying text entry, [abstract]), comprising: sending by a user a command to a television to active an on screen channel changer (media guidance application which includes an interactive television program guide sometimes referred to as an electronic program guide which allows users to navigate among television programming, [0027]; media guidance application may be organized by time and channel in a grid, [0029]; a user may indicate a desire to access media information by selecting a selectable option provided in a display screen or pressing a dedicated GUIDE button on a remote control or other user input interface device, [0029]); navigating focus by the user to a show name in a list of one or more program listings displayed by the on screen channel changer (as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title, candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]); and selecting by the user the show name that has focus (user can select program listings by moving highlight region 110, [0030]; fig.1).

Regarding claim 19, Peterson teaches the step of: selecting by the user one or more number buttons on a number (alphanumeric [letters and numbers] navigation and input, [0008]) entry bar (although visual keypad 500 is shown as a rectangular grid, the shape, size and letter layout of the visual keypads described herein may differ and may be square or a single row [bar] or column of lettered buttons, [0066]; fig.5A) of the on screen channel changer to determine the list that is displayed (as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title, candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]).

Regarding claim 20, Peterson teaches the list is comprised of one or more previously viewed channel numbers ([figure 12 shows that the user's profile may determine which candidate strings to display 1220]; media guidance application may monitor user activity to determine various user preferences in order to create a personalized guidance application showing favorite [previously viewed] channel selections, [0037]).

Claims 1-17 lack an inventive step under PCT Article 33(3) as being obvious over Peterson in view of Ahida.

Regarding claim 1, Peterson teaches a non-transitory computer readable storage medium having stored thereon instructions that cause a processor to execute a method (control circuitry executes instructions for a media guidance application stored in memory, [0042]) for changing a channel number on a television (media guidance application which includes an interactive television program guide sometimes referred to as an electronic program guide which allows users to navigate among television programming, [0027]; media guidance application may be organized by time and channel in a grid, [0029]), the method comprising the steps of: receiving a command from a user to activate an on screen channel changer on the television (a user may indicate a desire to access media information by selecting a selectable option provided in a display screen or pressing a dedicated GUIDE button on a remote control or other user input interface device, [0029]); rendering the on screen channel changer on a screen of the television upon receiving the command from the user (in response to the user's indication, the media guidance application provides a display screen with media information organized by time and channel in a grid, [0029]); receiving a selection wherein the user makes the selection using the on screen channel changer (user can select program listings by moving highlight region 110, [0030]; fig.1); and presenting content associated with the selection on the screen upon receiving the selection (information relating to the program listing selected by highlight region 110 may be provided in program information region 112 wherein region 112 may include the program title, description, time, channel, rating, and other desired information, [0030]; fig.1), but does not disclose the selection is a channel number selection. However, Peterson does teach channel selection ([0027]; [0029]) and further teaches a numeric keypad (alphanumeric [letters and numbers] navigation and input, [0008]). Furthermore it is well known in the art of television to allow a user to input a channel selection number corresponding to a broadcast channel desired (see Ahida, [abstract]; [col.1 ln.5-10]; [col.2 ln.35-50]). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide channel number selection capabilities as taught by Ahida using the numeric keypad of Peterson in order to allow a user to quickly select broadcast channels with minimum operations required to reduce burden on the user (Ahida, [col.2 ln.26-34]).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/036819

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**

Continuation of:

Regarding claim 10, Peterson teaches a television system (media guidance application which includes an interactive television program guide sometimes referred to as an electronic program guide which allows users to navigate among television programming, [0027]; media guidance application may be organized by time and channel in a grid, [0029]), comprising: a memory (memory, [0042]); a screen (on-screen keypad, [0008]); a user input device (a user may indicate a desire to access media information by selecting a selectable option provided in a display screen or pressing a dedicated GUIDE button on a remote control or other user input interface device, [0029]); a processor in communication with the memory and the screen (control circuitry executes instructions for a media guidance application stored in memory, [0042]), the processor operable to: receive a command from a user to change a channel number on the television (a user may indicate a desire to access media information by selecting a selectable option provided in a display screen or pressing a dedicated GUIDE button on a remote control or other user input interface device, [0029]); render an on screen channel changer on the screen upon receiving the command from the user (in response to the user's indication, the media guidance application provides a display screen with media information organized by time and channel in a grid, [0029]); receive a selection when the user makes the selection using the on screen channel changer (user can select program listings by moving highlight region 110, [0030]; fig.1); and present content associated with the selection on the screen upon receiving the selection (information relating to the program listing selected by highlight region 110 may be provided in program information region 112 wherein region 112 may include the program title, description, time, channel, rating, and other desired information, [0030]; fig.1), but does not disclose the selection is a channel number selection. However, Peterson does teach channel selection ([0027]; [0029]) and further teaches a numeric keypad (alphanumeric [letters and numbers] navigation and input, [0008]). Furthermore it is well known in the art of television to allow a user to input a channel selection number corresponding to a broadcast channel desired (see Ahida, [abstract]; [col.1 ln.5-10]; [col.2 ln.35-50]). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide channel number selection capabilities as taught by Ahida using the numeric keypad of Peterson in order to allow a user to quickly select broadcast channels with minimum operations required to reduce burden on the user (Ahida, [col.2 ln.26-34]).

Regarding claim 2, Peterson teaches the on screen channel changer includes a number entry bar with number buttons (alphanumeric [letters and numbers] navigation and input, [0008]; although visual keypad 500 is shown as a rectangular grid, the shape, size and letter layout of the visual keypads described herein may differ and may be square or a single row [bar] or column of lettered buttons, [0066]; fig.5A).

Regarding claim 3, modified Peterson teaches the selection is a channel number selection, per above discussion, and Peterson further teaches only number buttons that produce selectable selections are enabled on the number entry bar (characters that cannot possibly be the next user input selection may be grayed out or disabled in the visual keypad and in some embodiments, the grayed out or disabled keys are actually removed from the visual keypad display, [0013]).

Regarding claim 4, modified Peterson teaches the selection is a channel number selection, per above discussion, and Peterson further teaches the steps of: receiving one or more selections by the user (alphanumeric [letters and numbers] navigation and input, [0008]) from the number entry bar (although visual keypad 500 is shown as a rectangular grid, the shape, size and letter layout of the visual keypads described herein may differ and may be square or a single row [bar] or column of lettered buttons, [0066]; fig.5A); and rendering a dynamic electronic program guide in the on screen channel changer upon receiving a first of the one or more selections (as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title, candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]), wherein: the dynamic electronic program guide displays a first list, the first list is comprised of program listings for a plurality of selectable content (media guidance application may be organized by time and channel in a grid, [0029]), and the plurality of selectable content are selectable content with a first number equal to the first of the one or more selections (after a user selects a character within the keypad for input, buttons corresponding to letters [since the keypad is alphanumeric, the character could be a number] that cannot possible be the next character in the user input string may be disabled wherein valid candidate strings are based on the program schedule database, [0081]; fig.9).

Regarding claim 5, modified Peterson teaches the selection is a channel number selection, per above discussion, and Peterson further teaches the steps of: receiving a second of the one or more selections (keypad is redisplayed with a greater or fewer number of buttons after each character input, [0082]; fig.9), wherein the dynamic electronic program guide replaces the first list with a second list (as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title, candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]); wherein the second list is comprised of program listings for a plurality of selectable content (valid program titles currently accessible by the user, [0010]); and wherein the plurality of selectable content are selectable content with a first number equal to the first of the one or more selections and a second number equal to the second of the one or more selections (as the user inputs characters of the program title, candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; figure 9]).

Regarding claim 6, Peterson teaches the steps of: receiving one or more focus decisions from the user (user can select program listings by moving highlight region 110, [0030]; fig.1); and rendering a program preview in the on screen channel changer when a show name has focus, wherein the program preview provides program information for the show that has focus (information relating to the program listing selected by highlight region 110 may be provided in program information region 112 wherein region 112 may include the program title, description, time, channel, rating, and other desired information, [0030]; fig.1).

Regarding claim 7, Peterson teaches the on screen channel changer includes a mini electronic program guide (media guidance displays may be fully or partially overlaid over media content being displayed, [0029]), wherein the mini electronic program guide displays program listings for one or more previously viewed channel numbers (media guidance application may monitor user activity to determine various user preferences in order to create a personalized guidance application showing favorite [previously viewed] channel selections, [0037]).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/036819

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 8, Peterson teaches only one number button (alphanumeric [letters and numbers] navigation and input, [0008]) may be selected by the user at a time ([see figure 9]).

Regarding claim 9, modified Peterson teaches the selection is a channel number selection, per above discussion, and Peterson further teaches the steps of: rendering in the on screen channel changer (in response to the user's indication, the media guidance application provides a display screen with media information organized by time and channel in a grid, [0029]) a dynamic electronic program guide when the user selects one or more of the number buttons (after a user selects a character within the keypad for input, buttons corresponding to letters [since the keypad is alphanumeric, the character could be a number] that cannot possible be the next character in the user input string may be disabled wherein valid candidate strings are based on the program schedule database, [0081]; fig.9; as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title, candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]); displaying, by the dynamic electronic program guide, program listings for one or more channel numbers in response to the user selecting a first of the one or more number buttons; and changing the program listings in response to the user selecting a next of the one or more number buttons, where the one or more selectable selections are comprised of numbers represented by the one or more number buttons selected by the user (as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title [each time a user enters a character, the guide is updated], candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]).

Regarding claim 11, Peterson teaches the on screen channel changer includes a number (alphanumeric [letters and numbers] navigation and input, [0008]) entry bar (although visual keypad 500 is shown as a rectangular grid, the shape, size and letter layout of the visual keypads described herein may differ and may be square or a single row [bar] or column of lettered buttons, [0066]; fig.5A).

Regarding claim 12, modified Peterson teaches the selection is a channel number selection, per above discussion, and Peterson further teaches receiving one or more selections by the user (user input, [0010]) from the number entry bar (although visual keypad 500 is shown as a rectangular grid, the shape, size and letter layout of the visual keypads described herein may differ and may be square or a single row [bar] or column of lettered buttons, [0066]; fig.5A); and rendering a dynamic electronic program guide (in response to the user's indication, the media guidance application provides a display screen with media information organized by time and channel in a grid, [0029]) in the on screen channel changer upon receiving a first selection (after a user selects a character within the keypad for input, buttons corresponding to letters [since the keypad is alphanumeric, the character could be a number] that cannot possible be the next character in the user input string may be disabled wherein valid candidate strings are based on the program schedule database, [0081]; fig.9; as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title, candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]), the dynamic electronic program guide displaying lists of program listings for one or more channel numbers (valid program titles, [0010]; guidance application may be organized by time and channel in a grid, [0029]), wherein: a first list is comprised of one or more selectable content with a first number beginning with the first selection ([see figure 9 wherein the alphanumeric keypad may accept numeric input instead of alphabetic input]); a second list is comprised of one or more channels selectable content with the first number beginning with the first selection and a second number beginning with a second selection; and a third list is comprised of one or more selectable content with the first number beginning with the first selection, the second channel number beginning with the second selection, and a third number beginning with a third selection (as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title [each time a user enters a character, the guide is updated], candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]).

Regarding claim 13, Peterson does not explicitly teach the one or more channel numbers includes eleven channel numbers. However, Ahida teaches 10 channel numbers ([see figure 1]). Furthermore, it is known in the art of on screen interfaces to include additional buttons for ease of user navigation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide channel numbers as taught by Ahida including a total of eleven channel numbers in the invention of modified Peterson since the provision of adjustability, where needed, involves only routine skill in the art, and such a modification would allow a user to customize their interface with commonly used channel numbers.

Regarding claim 14, Peterson teaches the processor is further operable to: receive one or more selections by the user (user input, [0010]) from the number entry bar (although visual keypad 500 is shown as a rectangular grid, the shape, size and letter layout of the visual keypads described herein may differ and may be square or a single row [bar] or column of lettered buttons, [0066]; fig.5A); render a dynamic electronic program guide in the on screen channel changer upon receiving a first selection, the dynamic electronic program guide displaying a list of program listings for at least four channel numbers, the program listings including one or more show names (as the user is searching for a program title, all valid program titles currently accessible by the user may be indexed in a table and as the user inputs characters of the program title, candidate resultant strings that do not match the user's input may be removed or pruned from the list or tree, [0010]; [figure 9 shows the candidate strings and figure 12 shows that the list of candidate strings is displayed 1212 to the user and the user may select one of the candidates in the list 1222]); receive one or more focus decisions by the user (user can select program listings by moving highlight region 110, [0030]; fig.1); and render a program preview in the on screen channel changer when a show name has focus, wherein the program preview comprises at least one of: a show name; an episode number; an episode name; a start time; an end time; and a description of the show (information relating to the program listing selected by highlight region 110 may be provided in program information region 112 wherein region 112 may include the program title, description, time, channel, rating, and other desired information, [0030]; fig.1).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036819

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 15, Peterson teaches the program preview includes a thumbnail image (display may include a video region that allows a user to preview programs wherein the content of the video region corresponds to one of the listings displayed in the grid, [0033]).

Regarding claim 16, Peterson teaches the on screen channel changer includes a mini electronic program guide (media guidance displays may be fully or partially overlaid over media content being displayed, [0029]); and the mini electronic program guide displays program listings for one or more previously viewed channels (media guidance application may monitor user activity to determine various user preferences in order to create a personalized guidance application showing favorite [previously viewed] channel selections, [0037]).

Regarding claim 17, Peterson teaches the user input device comprises at least one of a remote control (a user may indicate a desire to access media information by selecting a selectable option provided in a display screen or pressing a dedicated GUIDE button on a remote control or other user input interface device, [0029]), a voice capture device, a gesture capture device, a touch screen, or a smart device.

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

GROVER, Douglas, M.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-470-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/036782	16 April 2013 (16.04.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Philippe Bécamel

e-mail: pt03.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-470-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/036782	International filing date *(day/month/year)* 16 April 2013 (16.04.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: DOUGLAS M. GROVER
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	28 JUN 2013

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-470-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/036782	16 April 2013	14 June 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 3/00 (2013.01)
USPC - 725/46

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	31 May 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036782

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

   ☐ on paper

   ☐ in electronic form

   b. (time)

   ☐ in the international application as filed

   ☐ together with the international application in electronic form

   ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036782

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-3, 5, 7, 11-13, 15,17, and 20 lack an inventive step under PCT Article 33(3) as being obvious over Bangalore et al, hereinafter Bangalore in view of Thomas et al, hereinafter Thomas.

Regarding Claims 1, Bangalore teaches a method for accessing media comprising (paragraph 24 for having an IPTV system to access media and display on the TV device element 124): searching a network to identify a plurality of media sources (paragraph 29 for the IPTV system having a private network element 110, a public network element 112 and a search agent element 210 with paragraph 30 for the search agent element 210 searching video streams sent to the set top box element 116), and having media items associated with the media sources (paragraph 35 for the search agent element 210 finding items associated with a website for purchase and searching other media sources such as social network websites and news websites and outputting the results associated with the keywords); identifying metadata associated with the determined number of media items (paragraph 32 for receiving and analyzing metadata from the video stream and updating the user profile with the metadata and paragraph 37 for analyzing the metadata from the video streams); storing the metadata in a memory (paragraph 32 for storing the metadata to update the user profile and store the metadata in the user profile repository); receiving a request from a user to display one or more of the media items (paragraph 26 for the user requesting video on demand content and accessing the video from a set top box, or over the network on a computer) and displaying the one or more media items based on the stored metadata (page 26 for displaying the video to the user using user interface to access the TV2 server or displaying the media from the computer). Bangalore does not explicitly teach determining a number of media items associated with media sources. Thomas has methods for providing guidance to users for finding media (abstract) and teaches determining a number of media items associated with media sources (paragraph 74 for searching media items based on user's define search strings, and paragraph 77 for having a number of media items associated with groups or sub-groups of media sources based on user preferences). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the number determination as taught by Thomas in the media method of Bangalore in order to configuring a menu screen according to a user's preferences (Thomas, paragraph 77).

Regarding Claims 11, Bangalore discloses a system for accessing media comprising (paragraph 24 for having an IPTV system to access media and display on the TV device element 124): a search engine configured to search a network to identify a plurality of media sources (paragraph 29 for the IPTV system having a private network element 110, a public network element 112 and a search agent element 210 with paragraph 30 for the search agent or search engine means element 210 searching video streams sent to the set top box element 116), and having media items associated with the media sources (paragraph 35 for the search agent element 210 finding items associated with a website for purchase and searching other media sources such as social network websites and news websites and outputting the results associated with the keywords); a media module configured to identify metadata associated with the determined number of media items (paragraph 32 for getting metadata from the video stream and updating the user profile with the metadata and paragraph 37 for analyzing the metadata from the video streams); a memory configured to store the metadata (paragraph 32 for storing the metadata to update the user profile and store the metadata in the user profile repository); a user interface configured to receive a request from a user to display one or more of the media items (paragraph 26 for the user requesting video on demand content and accessing the video from a set top box, or over the network on a computer and the user interface to the TV2 server); and a display configured display the one or more media items based on the stored metadata (paragraph 35 for allowing users to navigate the information and purchase the products or select and offer and allowing the user to access a list of coupons, products or headlines or displayed items and paragraph 32 for displaying user profile or metadata collected from streaming video). Bangalore does not explicitly disclose determining a number of media items associated with media sources. Thomas has methods for providing guidance to users for finding media (abstract) and discloses determining a number of media items associated with media sources (paragraph 74 for searching media items based on user's define search strings, and paragraph 77 for having a number of media items associated with groups or sub-groups of media sources based on user preferences). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the number determination as taught by Thomas in the media system of Bangalore in order to configuring a menu screen according to a user's preferences (Thomas, paragraph 77).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036782

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding Claims 2, Bangalore teaches receiving a search request from the user for an individual media item (paragraph 35 for the search agent element 210 finding items associated with a website for purchase and searching other media sources such as social network websites and news websites and outputting the results associated with the keywords); in response to receiving the search request (paragraph 35 for performing a keyword search for news, social media or e-commerce), identifying multiple media sources in the plurality of media sources that have the individual media item (paragraph 35 for the search agent element 210 finding items associated with a website for purchase and displaying the results via the set top box by identifying the different websites that have the desired item); presenting a list of offers from the multiple media sources to the user for the individual item (paragraph 35 for offering the user advertisements, coupons, price comparisons and news headlines or a list of offers based on the keyword searches); receiving a selection by the user of an individual offer from the list of offers (paragraph 35 for the user having a list of searched offers with, paragraph 26 for the user requesting video on demand content and accessing the video from a set top box, or over the network on a computer); and in response to receiving the selection by the user (paragraph 35 for allowing users to navigate the information and purchase the products or select and offer), providing access to the individual item (paragraph 35 for allowing the user to access a list of coupons, products or headlines by navigating through the offers).

Regarding Claims 12, Bangalore discloses wherein: the search engine is further configured to receive a search request from the user for an individual media item (paragraph 35 for the search agent element 210 finding items associated with a website for purchase and searching other media sources such as social network websites and news websites and outputting the results associated with the keywords) and identify multiple media sources in the plurality of media sources that have the individual media item in response to receiving the search request (paragraph 35 for the search agent element 210 finding items associated with a website for purchase and displaying the results via the set top box by identifying the different websites that have the desired item); the media module is further configured to present a list of offers from the multiple media sources to the user for the individual item (paragraph 35 for offering the user advertisements, coupons, price comparisons and news headlines or a list of offers based on the keyword searches) and provide access to an individual item in response to receiving a selection by the user (paragraph 35 for the user having a list of searched offers with, paragraph 26 for the user requesting video on demand content and accessing the video from a set top box, or over the network on a computer or having access to desired video); and the user interface is further configured to receive the selection by the user of the individual offer from the list of offers (paragraph 35 for allowing the user to access a list of coupons, products or headlines by navigating through the search results and the key words).

Regarding Claims 3 and 13, Bangalore teaches wherein the list of offers comprise is at least one of: an offer to play the individual media item, an offer to view the individual media item, a pay per view offer to view the individual media item, an offer to rent the individual media item, an offer to purchase a ticket to a movie theater showing the individual media item, an offer to purchase the individual media item, a trial access offer to the individual media item, and an offer to access the individual media item on a social media site (paragraph 35 for presenting offers to obtain a coupon, purchase and item, or view headlines via a social media site).

Regarding Claims 5 and 15, Bangalore teaches wherein the plurality of media sources comprises at least two of a video server, an audio server, a Digital Video Recorder (DVR), a set-top box, a social media site, a voice mail server, a source marked by the user, a content provider, a Compact Disk (CD) player, a Digital Video Device (DVD) player, a cellular telephone, a personal digital assistant, a notebook, an audio player, a document server, a Personal Computer (PC), a Really Simple Syndication (RSS) feed, a social media site, a USB device, and a tablet device (paragraph 29 for using a search agent to search can access view streams sent to a set top box, a computer, and a mobile device that may be at another location as shown in figure 2 where the search agent element 210 goes through the network element 112 to search the mobile device element 220 and the computer element 168, see also paragraph 43 for the user network environment using tablets, PDAs and wireless phones on the network as mobile devices).

Regarding Claims 7 and 17, Bangalore teaches the method as shown above. Bangalore does not explicitly teach wherein the displayed one or more media items are organized based at least one of: a media type, a most viewed, a favorites list, a last viewed, a most recently added, a most recently visited, a most recently played, and a most recently purchased. Thomas has methods for providing guidance to users for finding media (abstract) and teaches wherein the displayed one or more media items are organized based at least one of: a media type, a most viewed, a favorites list, a last viewed, a most recently added, a most recently visited, a most recently played, and a most recently purchased (paragraph 75 for having a criteria for selecting media based on favorites list). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the number determination as taught by Thomas in the media method of Bangalore in order to configuring a menu screen according to a user's preferences (Thomas, paragraph 77).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036782

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding Claims 20, Bangalore discloses a non-transient computer readable medium having stored thereon instructions that cause a processor to execute a method (paragraph 24 for having an IPTV system to access media and display on the TV device element 124 with figure 1 element 104 for an application tier with applications or computer readable programs), the method comprising: instructions to search a network to identify a plurality media sources (paragraph 29 for the IPTV system having a private network element 110, a public network element 112 and a search agent element 210 with paragraph 30 for the search agent or search engine means element 210 searching video streams sent to the set top box element 116); instructions to have media items associated with the media sources (paragraph 35 for the search agent element 210 finding items associated with a website for purchase and searching other media sources such as social network websites and news websites and outputting the results associated with the keywords); instructions to identify metadata associated with the determined number of media items (paragraph 32 for getting metadata from the video stream and updating the user profile with the metadata and paragraph 37 for analyzing the metadata from the video streams); instructions to store the metadata in a memory (paragraph 32 for storing the metadata to update the user profile and store the metadata in the user profile repository); instructions to receive a request from a user to display the one or more media items (paragraph 26 for the user requesting video on demand content and accessing the video from a set top box, or over the network on a computer and the user interface to the TV2 server); and instructions to display the media items based on the stored metadata (paragraph 35 for allowing users to navigate the information and purchase the products or select and offer and allowing the user to access a list of coupons, products or headlines or displayed items and paragraph 32 for displaying user profile or metadata collected from streaming video). Bangalore does not explicitly disclose determining a number of media items associated with media sources. Thomas has methods for providing guidance to users for finding media (abstract) and discloses determining a number of media items associated with media sources (paragraph 74 for searching media items based on user's define search strings, and paragraph 77 for having a number of media items associated with groups or sub-groups of media sources based on user preferences). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the number determination as taught by Thomas in the media system of Bangalore in order to configuring a menu screen according to a user's preferences (Thomas, paragraph 77).

Claims 4, 9, 14, and 19 lack an inventive step under PCT Article 33(3) as being obvious over Bangalore in view of Thomas, and further in view of LaFreniere et al, hereinafter LaFreniere.

Regarding Claims 4 and 14, Bangalore teaches wherein at least one of the displayed one or more media items is a link to a social media site and wherein the link to the social media site (paragraph 35 for using keywords to search a social media site and providing the information to the set top box). Bangalore and Thomas do not explicitly teach comprises at least one of a link to a most recent posting by the user, a link to a most recently accessed social media site, a link to a favorite social media site, a link to a recently added social media site, a link to a last view social media site. LaFreniere has a system and method for updating viewing status between a set-top box and one or more social networks (abstract) and teaches teach comprises at least one of a link to a most recent posting by the user, a link to a most recently accessed social media site, a link to a favorite social media site, a link to a recently added social media site, a link to a last view social media site (paragraph 47 for using the television system for updating information on a social network and posting viewing information to the user's Facebook and Twitter account). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the link as taught by LaFreniere in the media system of Bangalore in order to update user's viewing information to a social network (LaFreniere, paragraph 47).

Regarding Claims 9 and 19, Bangalore teaches the method as shown above. Bangalore does not explicitly teach wherein the user approves the identified plurality of media sources. LaFreniere has a system and method for updating viewing status between a set-top box and one or more social networks (abstract) and teaches wherein the user approves the identified plurality of media sources (paragraph 51 for the user having permission rules or approval of the media that communicates with the set top box for allowing certain family member to see the media). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the permission as taught by LaFreniere in the media method of Bangalore in order to allow permission for family member to access the media (LaFreniere, paragraph 51).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036782

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Claims 6, 8, 16, and 18 lack an inventive step under PCT Article 33(3) as being obvious over Bangalore in view of Thomas, and further in view of Bachman et al, hereinafter Bachman.

Regarding Claims 6 and 16, Bangalore and Thomas teach the method as shown above. Bangalore and Thomas do not explicitly teach wherein at least one of the media sources is a device that is temporarily connected to the network. Bachman has Playlists having media items from more than one source (abstract) and teaches wherein at least one of the media sources is a device that is temporarily connected to the network (paragraph 24 for having an online store where the user has temporary access to the media or temporary adding media to viewing options due to ownership by another source). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the permission as taught by LaFreniere in the media method of Bangalore in order to allow a second source to provide the media items (Bachman, paragraph 24).

Regarding Claims 8 and 18, Bangalore and Thomas teach the method as shown above. Bangalore and Thomas do not explicitly teach wherein the user can temporarily add a media source to the plurality of media sources. Bachman has Playlists having media items from more than one source (abstract) and teaches wherein the user can temporarily add a media source to the plurality of media sources (paragraph 24 for having an online store where the user has temporary access to the media or temporary adding media to viewing options due to ownership by another source). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the permission as taught by LaFreniere in the media method of Bangalore in order to allow a second source to provide the media items (Bachman, paragraph 24).

Claim 10 lacks an inventive step under PCT Article 33(3) as being obvious over Bangalore in view of Thomas, and further in view of Egli et al, hereinafter Egli.

Regarding Claims 10, Bangalore and Thomas teach the method as shown above. Bangalore and Thomas do not explicitly teach wherein the user can identify a media item to be translated when accessed in the future. Egli has an online media delivery system incorporating combining on-the-fly media reformatting (abstract) and teaches wherein the user can identify a media item to be translated when accessed in the future (paragraph 33 for translating a media object for storage on a target device and storing the media object in the front side cache, therefore having it available for future access with paragraph 70 for using the objects in future requests). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the translation as taught by Egli in the media method of Bangalore in order to transform media items to client devices (Egli, paragraph 33).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

WEITZEL, Scott
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-471-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/036678	16 April 2013 (16.04.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Philippe Bécamel

e-mail: pt03.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-471-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/036678	International filing date *(day/month/year)* 16 April 2013 (16.04.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Scott Weitzel
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	30 AUG 2013
Applicant's or agent's file reference 6583-471-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/36678	16 April 2013 (16.04.2013)	14 June 2012 (14.06.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 3/0481, 3/0482 (2013.01)
USPC - 725/37

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	20 August 2013 (20.08.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/36678

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/36678

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-5, 7-13, and 15-19 lack an inventive step under PCT Article 33(3) as being obvious over US 2011/0093888 A1 to Araki et al. (hereinafter 'Araki') in view of US 2011/0016492 A1 (Morita).

As to claims 1 and 15, Araki discloses a method, comprising and non-transitory machine readable medium with instructions to cause the machine to perform (a method, including and interactive television hardware and software; Abstract and paragraph [0180]): displaying, on an electronic device, a user interface of the electronic device, the user interface comprising a number of settings associated with a number of operating parameters of the electronic device and further associated with a functional silo of the electronic device (displaying, on an interactive television (electronic device), visual user interface of the interactive television, user interface includes settings related to the functions of the display of the interactive television associated including inputs, and device utility applications (silo of the electronic device); paragraphs [0076], [0100], [0197]); receiving, at an input interface of the electronic device, a user interface event associated with the user interface (providing, at an input to the user interface of the display's interactive television, a user-effected "click event" (user interface event) related to a graphical user interface; Figure 1 and paragraphs [0080], [0083]); upon the user interface event indicating a setting change to at least one setting, applying the setting change to the electronic device substantially without delay (user-effected "click event" representing an adjustment of settings (settings change) to a setting, selectable TV settings (applying the settings change) to the interactive television is responsive at all times (without delay); paragraphs [0097], [0100], [0143]). Araki fails to disclose upon receiving the user interface event indicating an exit function, preserving the setting change to the electronic device. Morita discloses upon receiving the user interface event indicating an exit function, preserving the setting change to the electronic device (selection (receiving the user interface event) of a done option (exit function) saves all the settings and changes made to the device parameters; paragraph [0157]). It would have been obvious to one skilled in the art at the time of the invention to modify the Araki system to include upon receiving the user interface event indicating an exit function, preserving the setting change to the electronic device, as taught by Morita, because doing so would make the Araki system provide for completion of the user adjusted settings function and return the user to the previous screen or the current program being watched.

As to claims 2 and 16, Araki, in view of Morita, discloses the method and instructions of claims 1 and 15, respectively. Additionally, Araki discloses wherein: the user interface, further comprises, a number of targets, substantially each of the number of targets being associated with at least one setting (Figure 8 shows where the user interface further includes a number of icons (targets), substantially each number of icons (targets) is associated with TV setting, parental control, network (settings); Figure 8 and paragraph [0097]) and the user interface event indicating a setting change, further comprises, the user interface event setting focus to a current target (and the user-effected "click event" (user interface event) representing a user adjustment of settings (settings change), further includes, the user-effected "click event" (user interface event) adjustment of setting selecting (focusing) a menu item/icon (target); Figure 8 and paragraphs [0097], [0100]); and the user interface event indicating the exit function, further comprises, the user interface event removing focus from the current target (and the user-effected "click event" (user interface event) representing the "exit input" (exit) function, further includes, the user-effected "click event" (user interface event) moving back to a prior navigation configuration (removing focus from the current target); paragraphs [0023], [0130], [0146]).

As to claims 3 and 17, Araki, in view of Morita, discloses the method and instructions of claims 2 and 16, respectively. Additionally, Araki discloses wherein displaying the user interface further comprises selectively presenting a number of sub-interfaces, each sub-interface presenting a portion of the number of targets (Figures 5-8 show when displaying the user interface further includes presenting a number of selectable sub-menus (sub-interfaces), each menu presenting a portion of the main icons (targets); Figures 5-8 and paragraphs [0097], [0098]).

As to claims 4 and 18, Araki, in view of Morita, discloses the method and instructions of claims 3 and 17, respectively. In addition, Araki discloses wherein the user interface event indicating the exit function (where the user-effected "click event" (user interface event) specifies an "exit input" function; paragraphs [0023], [0130], [0146]), further comprises, a user interface event removing focus from a current sub-interface (further includes, the user-effected "click event" (user interface event) moving back to the prior layer of the navigation GUI (removing focus from a current sub-interface); paragraphs [0023], [0130], [0146]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/36678

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

The description is objected to as containing the following defect(s) under PCT Rule 66.2(a)(iii) in the form or contents thereof: Paragraph [0007], line 2 recites the limitation "a silos", however, this limitation should recite "a silo".

Claim 10 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: Claim 10, line 3 recites the limitation "a silos", however, this limitation should recite "a silo".

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/36678

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Box No. V: Citations and Explanations-***-

As to claims 5 and 19, Araki, in view of Morita, discloses the method and instructions of claims 4 and 18, respectively. Araki fails to disclose wherein the user interface event indicating an exit function, further comprises a cancel function, whereby a settings change is backed out. Morita discloses wherein the user interface event indicating an exit function, further comprises a cancel function, whereby a settings change is backed out (user selection (user interface event) of cancel option (cancel function), where discard all the changes made in screen (settings changes is backed out); Figure 10 and paragraph [0157]). It would have been obvious to one skilled in the art at the time of the invention to modify the Araki system to include wherein the user interface event indicating an exit function, further comprises a cancel function, whereby a settings change is backed out, as taught by Morita, because doing so would make the Araki system discard of all the changes made in the user interface screen and return the user to the previous screen or show that was displayed.

As to claim 7, Araki, in view of Morita, discloses the method of claim 2. Additionally, Araki discloses wherein the user interface event indicating a setting change, further comprises, a supplemental user interface event indicating a value of the setting associated with the setting change (where the user interface for inputting elements specifying increasing or decreasing of a slide bar values (setting change), further includes, a inputting via a slider bar (supplemental user interface event) via a series of input elements specifying associated values of the controlled iTV function; paragraphs [0144]-[0145]).

As to claim 8, Araki, in view of Morita, discloses the method of claim 1. Additionally, Araki discloses wherein at least one silo is an input source to the electronic device (where device inputs (silo) is a device input such as an HDMI or USB to the interactive television (electronic device); paragraph [0100]).

As claim 9, Araki in view of Morita, discloses the method of claim 1. Araki discloses wherein at least one silo is an application executable by the electronic device (where an IP TV (silo) is an application executed by the interactive television (electronic device); paragraph [0100]).

As to claim 10, Araki discloses an electronic device (interactive television; Figures 1, 4-8 and paragraph [0076]), comprising: a display, operable to present a visual portion of a audio-visual presentation (a display, operable to show a visual part of an audio-video presentation; Figures 1, 2, 4-8 and paragraphs [0076], [0077]); a silo, representing at least one of an application and an source input (a silo, having applications and device source inputs such as an HDMI or USB to the interactive television (electronic device); paragraph [0100]); a settings dialog, operable to present a number of settings associated with the silo (Figure 8 shows a setting dialog, operable to present a number of setting related to an movies application and/or device input such as HDMI (silo); Figures 7, 8 and paragraph [0100]); the settings dialog further comprising a number of targets, at least one target associated with a value of a setting of an operating parameter of the electronic device (settings dialog including a number of hotspot menu options/icons (targets), a hotspot menu options/icons (target) related to a value of setting active pixels (operating parameter) of the interactive television (electronic device); Figures 3A, 3B and paragraphs [0093], [0144]); an input operable to receive a user input (an input device to activate a click event via a user; paragraph [0077]); and upon receiving a user input setting focus to first target, applying the associated value to the setting for the silo associated with the first target (and upon providing user selection of a menu option/icon (first target), setting the active pixel values via a slide bar (applying the associated value to the setting) for a movies application and device inputs such as HDMI (silo) related to a menu option/icon (first target); paragraphs [0100], [0144]).

As to claim 11, Araki, in view of Morita, discloses the electronic device of claim 10. In addition, Araki discloses wherein, upon receiving the user input deselecting the first target as part of a cancel function, removing the applied associated value from the setting for the silo (where, upon providing a click action input device (user input), such as an "exit input" (cancel) function, changing the values via decreasing and/or increasing slide bar values related to an application and/or a device source input such as HDMI (silo) and moving back to a prior navigation configuration; paragraphs [0144]-[0146]).

As to claim 12, Araki, in view of Morita, discloses the electronic device of claim 10. In addition, Araki discloses at least one of the number of targets further comprise a user-determined value associated with at least one setting of the electronic device (one of the menu options/icons (targets) further includes user setting active pixels via increasing and/or decreasing values of a slide-bar (user determined value) related to user controlled iTV functions (electronic device); paragraphs [0144]-[0145]).

As to claim 13, Araki, in view of Morita, discloses the electronic device of claim 10. In addition, Araki discloses at least one sub-interface visually containing the first target and additional targets (a hotspots of menu (sub-interface) visually having the menu/icon (first target) and additional menu items/icon (targets); Figures 4-8, paragraph [0097]), whereby setting focus from a first target within the sub-interface to a second target not within the sub-interface causes the applied value associated with the setting to be preserved (where selecting or mousing over the hotspots (setting focus from a first target) within the menu items/icons to another menu item/icon in various hotspots (second target not within the sub-interface) causes the user set values via the slide bar setting to be confirm (preserved); paragraphs [0130], [0144]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/36678

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
-***-Continued from Previous Supplemental Box-***-

Claims 6 and 20 lack an inventive step under PCT Article 33(3) as being obvious over Araki in view of Morita, and further in view of US 2012/0120316 A1 (Lee).

As to claims 6 and 20, Araki, in view of Morita, discloses the method and instructions of claims 2 and 16, respectively. Araki, in view of Morita, fails to disclose wherein at least one of the number of targets is associated with settings which are preset settings. Lee discloses wherein at least one of the number of targets is associated with settings which are preset settings (where a number of menu screens or icons (targets) is related to preset items (settings which are preset settings); paragraph [0257]). It would have been obvious to one skilled in the art at the time of the invention to modify the Araki in view of Morita system to include wherein at least one of the number of targets is associated with settings which are preset settings, as taught by Lee, because doing so would make the Araki in view of Morita system provide for menu item setting in which the user is not permitted to edit.

Claim 14 lacks an inventive step under PCT Article 33(3) as being obvious over Araki in view of Morita and in further view of US 7,577,923 B2 to Beam, et al. (hereinafter 'Beam').

As to claim 14, Araki, in view of Morita, discloses the electronic device of claim 13. Araki, in view of Morita, fails to disclose setting focus from the first target to a third target, the third target being one of the additional targets within the sub-interface, causes the settings associated with the first target to be overwritten by the settings associated with the third target. Beam discloses setting focus from the first target to a third target, the third target being one of the additional targets within the sub-interface, causes the settings associated with the first target to be overwritten by the settings associated with the third target (selecting a view mode with a preferred setting (setting focus from the first target) within that view mode (additional targets within the sub-interface), causes the settings related to a mode (first) to toggle between an available mode and a preferred setting when selected and changes upon activation to indicate the currently selected mode (first target to be overwritten by the settings associated with the third target); Column 9, Lines 20-38). It would have been obvious to one skilled in the art at the time of the invention to modify the Araki in view of Morita system to include setting focus from the first target to a third target, the third target being one of the additional targets within the sub-interface, causes the settings associated with the first target to be overwritten by the settings associated with the third target, as taught by Beam, because doing so would make the Araki in view of Morita system provide for a preferred setting for each available view mode by changing the preferred setting via a user selection.

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

SWARTZ, Douglas, W.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-472-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/036804	16 April 2013 (16.04.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Simin Baharlou

e-mail: pt09.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-472-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/036804	International filing date *(day/month/year)* 16 April 2013 (16.04.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 11 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Simin Baharlou e-mail: pt09.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: DOUGLAS W. SWARTZ
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	01 JUL 2013
Applicant's or agent's file reference 6583-472-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/036804	16 April 2013	14 June 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/173 (2013.01)
USPC - 725/43

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	05 June 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	2-4, 7-13, 15-20	YES
	Claims	1,5, 6, 14, 21	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1, 5, 6, 14, 21, lack novelty under PCT Article 33(2) as being anticipated by Hardacker et al., hereinafter referred to as Hardacker.

Regarding claim 1, Hardacker discloses an Electronic Programming Guide (EPG) display for an intelligent television (TV), comprising a display on the intelligent TV, (figs.5 & 8 shows a television device 102 that accesses websites by utilizing the internet 702 and further a server constructs an Electronic Programming Guide (EPG) which is displayed on the television display 102 [interpreted as intelligent television], para 0246, 0247; figs 2 & 3 shows an EPG screenshot that displays television programming schedule on the EPG screen of the on screen displays (OSD's), para 0045, 0048), the display comprising:
a schedule portion accessible and/or configurable using an input device to display a schedule including past, current, and/or upcoming TV programs (figs 2 & 3 show an EPG guide with a section 60 [schedule portion] which provides the users television programs at particular date and time over a two week period of time [interpreted as a schedule including upcoming TV programs] with options to page from right to left and top to bottom to access contents and also provides the channel names for the respective television programs, para 0043, 0045-0047; a remote control which includes hot keys to access the screen is used to send commands to the set top box 106 by accessing the EPG, para 0048, 0075, 0076; a remote control includes buttons and has the functionality of clicking on the screen to select an icon on the menu, and further when a guide button is pressed on a remote control device the recorder becomes aware of the scheduled content is to be browsed from the EPG [interpreted as schedule portion accessible using an input device], para 0100, 0193);
and a banner portion configured to display EPG information related to a selected TV program in the schedule portion (figs 2 & 3 show an EPG guide with a section 64 [banner portion] which provides information content related to the television program being highlighted by the users selection in the EPG section 60 [schedule portion], and the section 64 provides entire detailed program information for the highlighted program [as we can see in the fig.2 the section 64 provides information about the television program "THREE WISHES" which is selected on the section 60], para 0047, 0074),
wherein the schedule and the displayed EPG information are built using EPG information aggregated from a plurality of EPG information sources (the receiver device such as a TV creates a database from information provided by the access device such as a set top box, each screen of the EPG is run and data is extracted, data includes name of the programs [EPG information source], obtaining the virtual numbers for channels such as HBO or CNN [EPG information source] and their content [EPG information sources], the TV stores this information in its own metadata database [aggregated EPG information] it uses these information to create its own EPG [EPG is built] and creates timers, further all the data which includes the scheduling data required to create the EPG comes from the access device, para 0048-0050; fig. 8 shows a OCR process initialization at step 354 service provider channel database is initialized and at step 358 it is determined that the 2 week guide for television channel information is out of date and updates it by getting data from the service provider database, para 0144, 0150, 0156-0162; figs 2 & 3 shows an EPG guide with a section 60 [schedule portion] which provides the users television programs at particular date and time over a two week period of time [interpreted as a schedule including upcoming TV programs] with options to page from right to left and top to bottom to access contents and also provides the channel names for the respective television programs, para 0043, 0045-0047).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 14, Hardacker discloses a method of displaying Electronic Programming Guide (EPG) information on a intelligent television (TV) (a method is shown in figs.5 & 8 for a television device 102 that accesses websites by utilizing the internet 702 and further a server constructs an Electronic Programming Guide (EPG) which is displayed on the television display 102 [interpreted as intelligent television], abstract, para 0246, 0247; figs 2 & 3 shows an EPG screenshot that displays television programming schedule on the EPG screen of the on screen displays (OSD's), para 0045, 0048), comprising:
building and displaying aggregated EPG information from a plurality of EPG sources on a screen of the intelligent TV, the EPG sources comprise one or more of embedded EPG information in a content feed, an Internet EPG information source, and an EPG channel (the receiver device such as a TV creates a database from information provided by the access device such as a set top box, each screen of the EPG is run and data is extracted, data includes name of the programs [in reference to the Applicant's Specification on para 0171 which states that the embedded EPG information contains information which includes show name interpreted as embedded EPG information in a content feed], obtaining the virtual numbers for channels such as HBO or CNN [EPG information source] and their content [EPG information sources], the TV stores this information in its own metadata database [aggregated EPG information] it uses these information to create its own EPG [EPG is built] and creates timers, further all the data which includes the scheduling data required to create the EPG comes from the access device, para 0048-0050; fig. 8 shows a OCR process initialization at step 354 service provider channel database is initialized and at step 358 it is determined that the 2 week guide for television channel information is out of date and updates it by getting data from the service provider database, para 0144, 0150, 0156-0162; figs 2 & 3 shows an EPG guide displayed with a section 60 which provides the users television programs at particular date and time over a two week period of time with options to page from right to left and top to bottom to access contents and also provides the channel names for the respective television programs, para 0043, 0045-0047).

Regarding claim 5, Hardacker further teaches wherein the banner portion comprises one or more of a thumbnail, a name, a detailed description, a start and stop time, and a video and/or audio format for the selected TV program (figs 2 & 3 show an EPG guide with a section 64 [banner portion] which provides information content related to the television program being highlighted by the users selection in the EPG section 60 [schedule portion], and the section 64 provides entire detailed program information for the highlighted program [as we can see in the fig.2 the section 64 provides information about the television program "THREE WISHES" [interpreted as a name of the television program] which is selected on the section 60], para 0047, 0074).

Regarding claim 6, Hardacker further teaches wherein the EPG information sources comprise one or more of embedded EPG information in a content feed, an Internet EPG information source, and an EPG channel (the receiver device such as a TV creates a database from information provided by the access device such as a set top box, each screen of the EPG is run and data is extracted, data includes name of the programs [in reference to the Applicant's Specification on para 0171 which states that the embedded EPG information contains information which includes show name interpreted as embedded EPG information in a content feed], obtaining the virtual numbers for channels such as HBO or CNN [EPG information source] and their content [EPG information sources], the TV stores this information in its own metadata database [aggregated EPG information] it uses these information to create its own EPG [EPG is built] and creates timers, further all the data which includes the scheduling data required to create the EPG comes from the access device, para 0048-0050).

Regarding claim 21, Hardacker further teaches a tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed by the microprocessor, perform the steps of claim 14 (a computer readable storage medium includes a processor for executing programming instructions, para 0285).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Claims 2, 7-11, 16, 17, 20, lack an inventive step under PCT Article 33(3) as being obvious over Hardacker in view of Singh et al., hereinafter referred to as Singh.

Regarding claim 7, Hardacker discloses an Electronic Programming Guide (EPG) display for an intelligent television (TV), comprising a partial-screen display of the intelligent TV (figs.5 & 8 shows a television device 102 that accesses websites by utilizing the internet 702 and further a server constructs an Electronic Programming Guide (EPG) which is displayed on the television display 102 [interpreted as intelligent television], para 0246, 0247; figs 2 & 3 shows an EPG screenshot that displays television programming schedule on the EPG screen of the on screen displays (OSD's) [fig 2 further shows a part of screen which includes an active video which is being played, and the other part includes the program channel guide information interpreted as partial screen display], para 0045, 0048),
the partial-screen display comprising displayed EPG information regarding a TV program (figs 2 & 3 show an EPG guide with a section 60 which provides the users television programs at particular date and time over a two week period of time with options to page from right to left and top to bottom to access contents and also provides the channel names for the respective television programs, and further section 64 provides information content related to the television program being highlighted by the users selection in the EPG section 60 [fig 2 further shows a part of screen which includes an active video which is being played, and the other part includes the program channel guide information interpreted as partial screen display], para 0043, 0045-0047),
wherein the displayed EPG information is built using EPG information aggregated from a plurality of EPG information sources, the EPG information sources comprising one or more of embedded EPG information in a content feed, an Internet EPG information source, and an EPG channel (the receiver device such as a TV creates a database from information provided by the access device such as a set top box, each screen of the EPG is run and data is extracted, data includes name of the programs [in reference to the Applicant's Specification on para 0171 which states that the embedded EPG information contains information which includes show name interpreted as embedded EPG information in a content feed], obtaining the virtual numbers for channels such as HBO or CNN [EPG information source] and their content [EPG information sources], the TV stores this information in its own metadata database [aggregated EPG information] it uses these information to create its own EPG [EPG is built] and creates timers, further all the data which includes the scheduling data required to create the EPG comes from the access device, para 0048-0050; fig. 8 shows a OCR process initialization at step 354 service provider channel database is initialized and at step 358 it is determined that the 2 week guide for television channel information is out of date and updates it by getting data from the service provider database, para 0144, 0150, 0156-0162; figs 2 & 3 shows an EPG guide with a section 60 which provides the users television programs at particular date and time over a two week period of time with options to page from right to left and top to bottom to access contents and also provides the channel names for the respective television programs, para 0043, 0045-0047), but lacks the teaching of a partial-screen display on an in-use display of the intelligent TV.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches a partial-screen display on an in-use display of the intelligent TV (fig. 4 shows a television receiver with two on board tuners [intelligent TV] provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG which the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed, col.2, lines 57- 67- col.3, lines 1-30), the partial-screen display comprises EPG information regarding a TV program (the right half screen 23 [a partial-screen display] contains the interactive EPG which the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed, col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate a partial-screen display on an in-use display of the intelligent TV, the partial-screen display comprising displayed EPG information regarding a TV program into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 2, Hardacker further teaches wherein the display is a full-screen display and wherein the full-screen display further comprises a TV portion configured to display a TV program (figs 2 & 3 show an EPG guide [full screen display] with a section 60 which provides the users television programs at particular date and time over a two week period of time with options to page from right to left and top to bottom to access contents and also provides the channel names for the respective television programs, and further a window on the top right is show which provides active video [interpreted as TV portion configured to display a TV program], para 0043, 0045-0047), but lacks the teaching of comprises a live TV portion configured to display a selected TV program.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches comprises a live TV portion configured to display a selected TV program (fig. 4 shows a television receiver with two on board tuners [intelligent TV] provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, in the section 23 the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed, the EPG includes the PIP window and displays a currently telecast program and the viewer changes the program in the PIP by cursoring through the list of currently telecast programs [live TV portion] in the EPG, col.1, lines 39-49, col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate comprises a live TV portion configured to display a selected TV program into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).

Regarding claim 8, Hardacker lacks the teaching of wherein the partial-screen display overlays the in-use display of the intelligent TV.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches wherein the partial-screen display overlays the in-use display of the intelligent TV (fig. 4 shows a television receiver with two on board tuners [intelligent TV] provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG which the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed [fig. 4 shows the partial screen display overlays the in use display], col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate wherein the partial-screen display overlays the in-use display of the intelligent TV into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh Col. 1, lines 39-53).

Regarding claim 9, Hardacker lacks the teaching of wherein the in-use display comprises a currently playing TV program.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches wherein the in-use display comprises a playing TV program (fig. 4 shows a television receiver with two on board tuners [intelligent TV] provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG, the section 22 which is the in-use display receives a video program from an on board tuner and provides the video source 1 [interpreted as playing a TV program], col.2, lines 57- 67- col.3, lines 1-30). Furthermore, Singh teaches wherein the display comprises a currently playing TV program (in the section 23 the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed, the EPG includes the PIP window and displays a currently telecast program and the viewer changes the program in the PIP by cursoring through the list of currently telecast programs in the EPG, col.1, lines 39-49, col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate wherein the in-use display comprises a currently playing TV program into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).

Regarding claim 10, Hardacker lacks the teaching of wherein the partial-screen display resizes the in-use display.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches herein the partial-screen display resizes the in-use display (a television is provided with a remote control unit to control the television and scan through the EPG, the remote includes an EPG button upon pressing that button the EPG section of the screen comes up to present an multi window screen to the user as shown in fig.4 [as upon the user selection of the EPG button the screen becomes and multi window screen it is inherent that the partial screen display is resizes the in use display], col.3, lines 11-30; fig. 4 shows a television receiver with two on board tuners provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG, the section 22 which is the in-use display receives a video program from an on board tuner and provides the video source 1, col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate wherein the partial-screen display resizes the in-use display into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 11, Hardacker lacks the teaching of wherein the partial-screen display comprises a banner located at a top of the in-use display.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches wherein the partial-screen display comprises a banner located at the top of the display (fig. 4 shows a television receiver with two on board tuners provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG which the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) display [the PIP is interpreted as banner located on the top of the display], col.2, lines 57- 67- col.3, lines 1-30; the PIP part of the image is arbitrarily positioned anywhere within the main picture and can be resized, col.1, lines 25-30). Furthermore, to establish the banner to be located on top of the in-use display is a matter of design choice and would have been a known practice in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate wherein the partial-screen display comprises a banner located at a top of the in-use display into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).

Regarding claim 16, Hardacker lacks the teaching of further comprising displaying an in-use portion on the screen, wherein displaying the aggregated EPG information comprises displaying the aggregated EPG information on a partial-screen portion of the screen in combination with the in-use portion.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches comprising displaying an in-use portion on the screen, wherein displaying the aggregated EPG information comprises displaying the aggregated EPG information on a partial-screen portion of the screen in combination with the in-use portion (fig. 4 shows a television receiver with two on board tuners provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG, the section 22 which is the in-use display receives a video program from an on board tuner and provides the video source 1 [interpreted as displaying in use portion in combination with the partial screen portion], col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate w comprising displaying an in-use portion on the screen, wherein displaying the aggregated EPG information comprises displaying the aggregated EPG information on a partial-screen portion of the screen in combination with the in-use portion into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).

Regarding claim 17, Hardacker lacks the teaching of wherein the in-use portion comprises a currently playing TV program.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches wherein the in-use display comprises a playing TV program (fig. 4 shows a television receiver with two on board tuners [intelligent TV] provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG, the section 22 which is the in-use display receives a video program from an on board tuner and provides the video source 1 [interpreted as playing a TV program], col.2, lines 57- 67- col.3, lines 1-30). Furthermore, Singh teaches wherein the display comprises a currently playing TV program (in the section 23the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed, the EPG includes the PIP window and displays a currently telecast program and the viewer changes the program in the PIP by cursoring through the list of currently telecast programs in the EPG, col.1, lines 39-49, col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate wherein the in-use display comprises a currently playing TV program into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).

Regarding claim 20, Hardacker lacks the teaching of wherein the partial-screen portion comprises a banner located at a top of the in-use portion.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches wherein the partial-screen display comprises a banner located at the top of the display portion (fig. 4 shows a television receiver with two on board tuners provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG which the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) display [the PIP is interpreted as banner located on the top of the display], col.2, lines 57- 67- col.3, lines 1-30; the PIP part of the image is arbitrarily positioned anywhere within the main picture and can be resized, col.1, lines 25-30). Furthermore, to establish the banner to be located on top of the in-use portion is a matter of design choice and would have been a known practice in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate wherein the partial-screen display comprises a banner located at a top of the in-use portion into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Claims 3, 4, 15, lack an inventive step under PCT Article 33(3) as being obvious over Hardacker in view of Drazin et al., hereinafter referred to as Drazin.

Regarding claim 3, Hardacker lacks the teaching of wherein the display further comprises hot key functionalities accessible for one or more TV programs in the schedule.
Drazin is in the field of an electronic program guide for television programs presenting a list of programs on screen (abstract) and teaches wherein the display further comprises hot key functionalities accessible for one or more TV programs in the schedule (figs. 14b & 14c shows an EPG guide and which includes a button 720 "Keep" [interpreted as hot keys] which is displayed on the top of the screen here, a user selects the button 720 which results in action of labeling a program or series title which is in focus as kept and causes the programs to be kept in stack of 'kept' programs, para 0184). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Drazin to incorporate wherein the display further comprises hot key functionalities accessible for one or more TV programs in the schedule into the invention of Hardacker. The motivation would have been to provide an improved and effective EPG for a television system (see Drazin para 0001-0004).

Regarding claim 4, Hardacker lacks the teaching of wherein the hot key functionalities comprises one or more of displaying currently playing TV programs, assigning categories to the selected TV program, managing the selected TV program, and marking the selected TV program.
Drazin is in the field of an electronic program guide for television programs presenting a list of programs on screen (abstract) and teaches wherein the hot key functionalities comprises one or more of displaying currently playing TV programs, assigning categories to the selected TV program, managing the selected TV program, and marking the selected TV program (figs. 14b & 14c shows an EPG guide and which includes a button 720 "Keep" [interpreted as hot keys] which is displayed on the top of the screen here, a user selects the button 720 which results in action of labeling a program or series title which is in focus as kept and causes the programs to be kept in stack of 'kept' programs [the action of labeling is interpreted as marking the selected TV program], para 0184). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Drazin to incorporate wherein the hot key functionalities comprises one or more of displaying currently playing TV programs, assigning categories to the selected TV program, managing the selected TV program, and marking the selected TV program into the invention of Hardacker. The motivation would have been to provide an improved and effective EPG for a television system (see Drazin para 0001-0004).

Regarding claim 15, Hardacker further teaches wherein displaying the aggregated EPG information comprises displaying a combination of the aggregated EPG information and a schedule including current, and upcoming TV programs on a full-screen portion of the screen (figs 2 & 3 show an EPG guide with a section 60 [schedule portion] which provides the users television programs at particular date and time over a two week period of time [interpreted as a schedule including upcoming TV programs] with options to page from right to left and top to bottom to access future television programing contents and also provides the channel names for the respective television programs, para 0043, 0045-0047; the receiver device such as a TV creates a database from information provided by the access device such as a set top box, each screen of the EPG is run and data is extracted, data includes name of the programs, obtaining the virtual numbers for channels such as HBO or CNN and their content, the TV stores this information in its own metadata database [aggregated EPG information] it uses these information to create its own EPG which displays all the available current and future contents [current and upcoming TV programs], further all the data which includes the scheduling data required to create the EPG comes from the access device, para 0048-0050), wherein the schedule is accessible and configurable using an input device (a remote control which includes hot keys to access the screen is used to send commands to the set top box 106 by accessing the EPG, para 0048, 0075, 0076; a remote control includes buttons and has the functionality of clicking on the screen to select an icon on the menu, and further when a guide button is pressed on a remote control device the recorder becomes aware of the scheduled content is to be browsed from the EPG [interpreted as schedule portion accessible using an input device], para 0100, 0193), and wherein the schedule is built from the aggregated EPG information (the receiver device such as a TV creates a database from information provided by the access device such as a set top box, each screen of the EPG is run and data is extracted, data includes name of the programs, obtaining the virtual numbers for channels such as HBO or CNN [EPG information source] and their content, the TV stores this information in its own metadata database [aggregated EPG information] it uses these information to create its own EPG [EPG is built] and creates timers, further all the data which includes the scheduling data required to create the EPG comes from the access device, para 0048-0050), but lacks the teaching of the schedule includes past TV programs and wherein the schedule is accessible and configurable using an input device. Drazin is in the field of an electronic program guide for television programs presenting a list of programs on screen (abstract) and teaches wherein the schedule is accessible and configurable using an input device (a user moves a cursor [input device] onto a desired program and selects the "schedule" option in the EPG of fig.10, here the highlighted program "Football Italia" is to be repeated for the user and the viewer is presented with the option of recording the program and upon selection of "record" the program is setup to be recorded, para 0158, 0159, 0171). Furthermore, EPG schedules having past TV programs would have been a well known practice in the art and a matter of design choice. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Drazin to incorporate wherein the schedule is accessible and configurable using an input device into the invention of Hardacker. The motivation would have been to provide an improved and effective EPG for a television system and to provide the users informention on recently broadcast TV programs (see Drazin para 0001-0004).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Claims 12, 13, 18, 19, lack an inventive step under PCT Article 33(3) as being obvious over Hardacker in view of Singh and further in view of Ellis et al., hereinafter referred to as Ellis.

Regarding claim 12, Hardacker lacks the teaching of wherein the partial-screen display comprises an EPG information portion displaying the displayed EPG information located to the side of the in-use display and comprising a button portion having selectable buttons for accessing one or more of scenes, audio tracks, and subtitle tracks in the currently playing TV program.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches wherein the partial-screen display comprises an EPG information portion displaying the displayed EPG information located to the side of the in-use display (fig. 4 shows a television receiver with two on board tuners provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG which the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed on the side, col.2, lines 57- 67- col.3, lines 1-30) and comprising a button portion having selectable buttons for accessing the currently playing TV program (in the section 23the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed, the EPG includes the PIP window and displays a currently telecast program and the viewer changes the program in the PIP by cursoring through the list of currently telecast programs in the EPG, col.1, lines 39-49, col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate wherein the partial-screen display comprises an EPG information portion displaying the displayed EPG information located to the side of the in-use display into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).
Ellis is in the field of an interactive television program guide that provides users with opportunity to select languages for playing television programs (abstract) and teaches wherein the display comprises information portion comprising a button portion having selectable buttons for accessing one or more of scenes, audio tracks, and subtitle tracks in the TV program (figs 7a & 7b shows a information screen 161 which provides information for a program, the user gets more information about a program that he is watching by the info key and the user accesses various program guide functions and this includes button 157 which provides the user to select different languages which the user desires from a list of languages available to the user [select from a list of language is interpreted as selectable buttons for accessing audio tracks], page 25, lines 7-35, page 26, lines 1-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Ellis to incorporate wherein the display comprises information portion comprising a button portion having selectable buttons for accessing one or more of scenes, audio tracks, and subtitle tracks in the TV program into the invention of Hardacker. The motivation would have been to provide the users with an optimized information guide for better accessibility.

Regarding claim 13, Hardacker further teaches comprising a schedule for a channel playing the currently playing TV program (figs 2 & 3 show an EPG guide with a section 60 [schedule portion] which provides the users television programs at particular date and time over a two week period of time [interpreted as a schedule] with options to page from right to left and top to bottom to access contents and also provides the channel names for the respective television programs [fig. 2 shows the schedule for currently selected channel 4 NBC which is currently playing the television program "Three Wishes"], para 0043, 0045-0047; fig. 14 shows an image displaying details of a currently playing program channel and provides the schedule for it, para 0195, 0222).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/036804

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 18, Hardacker lacks the teaching of wherein the partial-screen portion is located to the side of the in-use portion and further comprises a button portion having at least one selectable button for accessing one or more of scenes, audio tracks, and subtitle tracks in the currently playing TV program.
Singh is in the field of a television receiver that displays two video programs and an electronic program guide simultaneously as a split screen (abstract, fig.4) and teaches wherein the partial-screen display comprises an EPG information portion displaying the displayed EPG information located to the side of the in-use display (fig. 4 shows a television receiver with two on board tuners provides an output screen 21 with a left hand screen 22 [an in-use display] which contains a first video program received from a video source, and the right half screen 23 [a partial-screen display] contains the interactive EPG which the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed on the side, col.2, lines 57- 67- col.3, lines 1-30) and comprising a button portion having selectable buttons for accessing the currently playing TV program (in the section 23the user can scroll through and select a program from a plurality of program channels which is viewed on the picture in picture (PIP) simultaneously with the video source 1 being viewed, the EPG includes the PIP window and displays a currently telecast program and the viewer changes the program in the PIP by cursoring through the list of currently telecast programs in the EPG, col.1, lines 39-49, col.2, lines 57- 67- col.3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Singh to incorporate wherein the partial-screen display comprises an EPG information portion displaying the displayed EPG information located to the side of the in-use display into the invention of Hardacker. The motivation would have been to provide the user with the function to watch a video program while scrolling through an interactive EPG for selecting programs (see Singh, Col. 1, lines 39-53).
Ellis is in the field of an interactive television program guide that provides users with opportunity to select languages for playing television programs (abstract) and teaches wherein the display comprises information portion comprising a button portion having selectable buttons for accessing one or more of scenes, audio tracks, and subtitle tracks in the TV program (figs 7a & 7b shows a information screen 161 which provides information for a program, the user gets more information about a program that he is watching by the info key and the user accesses various program guide functions and this includes button 157 which provides the user to select different languages which the user desires from a list of languages available to the user [select from a list of language is interpreted as selectable buttons for accessing audio tracks], page 25, lines 7-35, page 26, lines 1-11). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Ellis to incorporate wherein the display comprises information portion comprising a button portion having selectable buttons for accessing one or more of scenes, audio tracks, and subtitle tracks in the TV program into the invention of Hardacker. The motivation would have been to provide the users with an optimized information guide for better accessibility.

Regarding claim 19, Hardacker further teaches wherein the partial-screen portion further comprises a schedule for a channel playing the currently playing TV program (figs 2 & 3 show an EPG guide with a section 60 [schedule portion] which provides the users television programs at particular date and time over a two week period of time [interpreted as a schedule] with options to page from right to left and top to bottom to access contents and also provides the channel names for the respective television programs [fig. 2 shows the schedule for currently selected channel 4 NBC which is currently playing the television program "Three Wishes"], para 0043, 0045-0047; fig. 14 shows an image displaying details of a currently playing program channel and provides the schedule for it, para 0195, 0222).

Claims 1-21 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

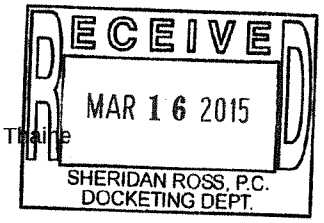
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



LENNOX-GENTLE, Thaine
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
26 February 2015 (26.02.2015)	
Applicant's or agent's file reference: 6583-478-PCT	IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055405	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant: FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

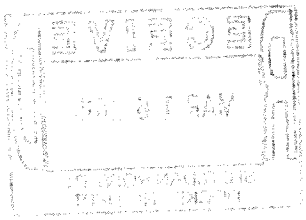
The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer: Simin Baharlou

e-mail: pt09.pct@wipo.int

VIZIO Ex. 1002, Page 3367 of 3573
VIZIO v. MMT, IPR2024-00722



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-478-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055405	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Simin Baharlou e-mail: pt09.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Thaine Lennox-Gentle
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	17 JAN 2014
Applicant's or agent's file reference 6583-478-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55405	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 3/048; H04N 21/40; H04B 1/16 (2014.01)
USPC - 715/836; 715/835; 348/553

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	05 January 2014 (05.01.2014)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55405

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55405

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	5, 6, 18-20	YES
	Claims	1-4, 7-17	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-4 and 7-17 lack novelty under PCT Article 33(2) as being anticipated by US 2009/0204929 A1 to BAURMANN, T. et al. (hereinafter 'Baurmann').

As per claim 1, Baurmann discloses a television system comprising: a screen (television screen [screen]; figure 2; paragraph [0008]); a memory (memory [memory]; figure 1; paragraph [0013]); a user input module for receiving a user navigation input from a user input source (IR receiver for receiving wireless signal from hand-held remote [user input module]; paragraph [0014]); a navigable user interface comprising: a list of two or more subsets of selectable channel tiles on the screen (favorite objects displayed in plurality of sub-groups on screen [two or more subsets]; figure 2; paragraph [0063]), the list being displayed laterally on the screen in a single row (list is displayed laterally [displayed laterally]; figure 2) and each of the subsets of selectable channel tiles containing at least one selectable channel tile (each sub-group contains one selectable tile [at least one selectable channel tile]; figure 2; paragraph [0063]); and a focus responsive to a user navigation input and indicating a selectable channel tile to be selected (focused icon in response to a user command [focus]; figure 2; paragraph [0008, 0018, 0019]); wherein each selectable channel tile is associated with a channel available for display by the television system (favorite objects are associated with respective TV channels to display [channel tile associated with channel]; figure 2, 3; paragraph [0016-0018]) and selection of a selectable channel tile causes the television system to display the channel associated with the selected channel tile (should the user manipulate, e.g., the enter key on the remote, the processor automatically causes the TV channel associated with the object to be tuned to and displayed [selection causes channel to be displayed]; figure 2; paragraph [0018]).

As per claim 2, Baurmann discloses the system of claim 1. Baurmann further discloses wherein only a portion of the list of two or more subsets of selectable channel tiles are displayed on the screen (only portion of favorite object displayed at edges of lateral menu [only portion displayed]; figure 2).

As per claim 3, Baurmann discloses the system of claim 1. Baurmann further discloses wherein the user data comprises at least a user-defined list of favorite channels (list of favorite channels selected by user [user-defined list of favorite channels]; figure 2, 3; paragraph [0016]) and a history of channels previously viewed by a user (history list [history of channels]; paragraph [0020, 0024]), and further wherein the two or more subsets of selectable channel tiles contain at least a first and second subset of selectable channel tiles (plurality of favorite objects contain plurality of selectable channel tiles [first and second subset of selectable channel tiles]; figure 2; paragraph [0063]), the first subset containing a list of selectable channel tiles corresponding to the user-defined list of favorite channels (favorite channel list displayed under TV channel favorite object [first subset favorite list]; figure 2; paragraph [0025-0032]) and the second subset containing a dynamically defined list of selectable channel tiles, the channel tiles of the second subset being defined based upon one or more of the user-defined list of favorite channels and a history of channels previously viewed by a user (favorite list and history list displayed under TV channel favorite object [second subset one or more of favorite list and history of channels]; figure 2, 3; paragraph [0020, 0024-0032, 0039]).

As per claim 4, Baurmann discloses the system of claim 1. Baurmann further discloses wherein the user input source is a remote control comprising a directional pad and a selection button (remote with D-pad [remote]; figure 1).

As per claim 7, Baurmann discloses a method of providing a user-interface for a television system comprising: displaying a list of two or more selectable channel tiles on a display (favorite objects displayed in plurality of sub-groups on screen [two or more subsets]; figure 2; paragraph [0063]); displaying a focus on a first of the two or more selectable channel tiles (focused icon in response to a user command [focus]; figure 2; paragraph [0008, 0018, 0019]); receiving a user input from a user input source (IR receiver for receiving wireless signal from hand-held remote [user input module]; paragraph [0014]); determining the type of user input received (processor determines the type of input received [determining input received]; figure 1, 3; paragraph [0014, 0017, 0018, 0022, 0024]); changing the focus from the first selectable channel tile to a second selectable channel tile when the user input indicates a directional change of the focus (user can manipulate remote control until object is focused object available for selection [changing focus using direction change]; figure 2; paragraph [0007]); displaying the channel associated with the currently focused selectable channel tile when the user input indicated selection of the currently focused selectable channel tile (should the user manipulate, e.g., the enter key on the remote, the processor automatically causes the TV channel associated with the object to be tuned to and displayed [selection causes channel to be displayed]; figure 2; paragraph [0018]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55405

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Box V: Citations and Explanations-***-

As per claim 8, Baurmann discloses the method of claim 7. Baurmann further discloses wherein the step of displaying a list of two or more selectable channel tiles on a display further comprises: categorizing the list of two or more selectable channel tiles into two subsets of selectable channel tiles (plurality of favorite objects contain plurality of selectable channel tiles [first and second subset of selectable channel tiles]; figure 2; paragraph [0063]); defining the first subset from a list of favorite channels (favorite channel list displayed under TV channel favorite object [first subset favorite list]; figure 2; paragraph [0025-0032]) and defining the second subset based upon one or more of the list of favorite channels and a history of channels previously viewed by a user (favorite list and history list displayed under TV channel favorite object [second subset one or more of favorite list and history of channels]; figure 2, 3; paragraph [0020, 0024-0032, 0039]); displaying the two subsets of selectable channel tiles laterally on the display in a single row (list is displayed laterally [displayed laterally] in a single row; figure 2) and displaying a demarcation indicator between the two subsets of selectable channel tiles (focused channel separates plurality of unselected objects in lateral row [displaying demarcation indicator]; figure 2).

As per claim 9, Baurmann discloses the method of claim 7. Baurmann further discloses, wherein changing the focus to an adjacent selectable tile results in only a portion of the list of two or more selectable channel tiles being displayed on the screen (only portion of favorite object displayed at edges of lateral menu [only portion displayed]; figure 2).

As per claim 10, Baurmann discloses the method of claim 7. Baurmann further discloses wherein the user input source is a remote control comprising at least a directional pad and a selection button (remote with D-pad and selection button [remote]; figure 1), further wherein the user input indicating a directional change of the focus is indicated by the directional pad and the user input indicating a selection of the currently focused selectable channel tile is indicated by the selection button (user can manipulate remote control until object is focused object available for selection by selection button [changing focus using direction change and selecting with selection button]; figure 2; paragraph [0007]).

As per claim 11, Baurmann discloses a non-transitory, tangible computer readable storage medium (memory [memory]; figure 1; paragraph [0013]), encoded with processor readable instructions (processor for processing software [processor readable instructions]; paragraph [0013]) which cause a computer to perform a method of providing a user-interface for a television system, the instructions comprising: instructions to display a list of two or more selectable channel tiles on a display (favorite objects displayed in plurality of sub-groups on screen [two or more subsets]; figure 2; paragraph [0063]); instructions to display a focus on a first of the two or more selectable channel tiles (focused icon in response to a user command [focus]; figure 2; paragraph [0008, 0018, 0019]); instructions to receive a user input from a user input source (IR receiver for receiving wireless signal from hand-held remote [user input module]; paragraph [0014]); instructions to determine the type of user input received (processor determines the type of input received [determining input received]; figure 1, 3; paragraph [0014, 0017, 0018, 0022, 0024]); instructions to change the focus from the first selectable channel tile to a second selectable channel tile when the user input indicates a directional change of the focus (user can manipulate remote control until object is focused object available for selection by selection button [changing focus using direction change and selecting with selection button]; figure 2; paragraph [0007]); and instructions to display the channel associated with the currently focused selectable channel tile when the user input indicated selection of the currently focused selectable channel tile (should the user manipulate, e.g., the enter key on the remote, the processor automatically causes the TV channel associated with the object to be tuned to and displayed [selection causes channel to be displayed]; figure 2; paragraph [0018]).

As per claim 12, Baurmann discloses the non-transitory, tangible computer readable storage medium of claim 11. Baurmann further discloses wherein the list of two or more selectable channel tiles are displayed laterally on the display in a single row (list is displayed laterally [displayed laterally]; figure 2).

As per claim 13, Baurmann discloses the non-transitory, tangible computer readable storage medium of claim 11. Baurmann further discloses wherein changing the focus to an adjacent selectable tile results in only a portion of the list of two or more selectable channel tiles being displayed on the screen (only portion of favorite object displayed at edges of lateral menu [only portion displayed]; figure 2).

As per claim 14, Baurmann discloses the non-transitory, tangible computer readable storage medium of claim 12. Baurmann further discloses wherein the list of two or more selectable channel tiles contains at least two subsets of selectable channel tiles (plurality of favorite objects contain plurality of selectable channel tiles [first and second subset of selectable channel tiles]; figure 2; paragraph [0063]).

As per claim 15, Baurmann discloses the non-transitory, tangible computer readable storage medium of claim 14. Baurmann further discloses wherein the at least two subsets of selectable channel tiles contain a first and second subset of selectable channel tiles (plurality of favorite objects contain plurality of selectable channel tiles [first and second subset of selectable channel tiles]; figure 2; paragraph [0063]), the first subset containing a static list of selectable channel tiles (favorite channel list displayed under TV channel favorite object where list is specified by user and cannot be changed unless manually changed by user [first subset favorite list]; figure 2; paragraph [0025-0032]) and the second subset containing a dynamically chosen list of selectable tiles (favorite list and history list displayed under TV channel favorite object where history list continually changes based upon recently viewed channels [second subset one or more of favorite list and history of channels]; figure 2, 3; paragraph [0020, 0024-0032, 0039]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55405

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As per claim 16, Baurmann discloses the non-transitory, tangible computer readable storage medium of claim 15. Baurmann further discloses the instructions including: instructions to define the first subset from a list of favorite channels (favorite channel list displayed under TV channel favorite object [first subset favorite list]; figure 2; paragraph [0025-0032]) and; instructions to define the second subset by recommending channels based upon one or more of the list of favorite channels and a history of channels previously viewed by a user (favorite list and history list displayed under TV channel favorite object [second subset one or more of favorite list and history of channels]; figure 2, 3; paragraph [0020, 0024-0032, 0039]).

As per claim 17, Baurmann discloses the non-transitory, tangible computer readable storage medium of claim 11. Baurmann further discloses wherein the user input source is a remote control comprising at least a directional pad and a selection button (remote with D-pad and selection button [remote]; figure 1), and further wherein the user input indicating a directional change of the focus is indicated by the directional pad and the user input indicating a selection of the currently focused selectable channel tile is indicated by the selection button (user can manipulate remote control until object is focused object available for selection by selection button [changing focus using direction change and selecting with selection button]; figure 2; paragraph [0007]).

Claims 5, 6, 18, and 19 lack an inventive step under PCT Article 33(3) as being obvious over Baurmann in view of US 6,629,077 B1 to ARLING, P. et al. (hereinafter 'Arling').

As per claims 5 and 18, Baurmann discloses the system and non-transitory, tangible computer readable storage medium of claims 1 and 11, respectively. However, Baurmann fails to disclose further comprising a microphone, and wherein the user input source is a voice command. However, Arling discloses further comprising a microphone, and wherein the user input source is a voice command (voice command received by microphone within universal remote [microphone for receiving voice command]; abstract; figure 3 and 4; column 4, lines 1-10). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system and non-transitory, tangible computer readable storage medium of Baurmann to include further comprising a microphone, and wherein the user input source is a voice command, as taught by Arling, because it is advantageous to have the ability to simplify remote input by utilizing voice commands.

As per claims 6 and 19, Baurmann discloses the system and non-transitory, tangible computer readable storage medium of claims 1 and 11, respectively. Baurmann fails to disclose wherein at least a portion of the screen is capable of receiving a touch input and the user input source is a touch input. However, Arling discloses wherein at least a portion of the screen is capable of receiving a touch input and the user input source is a touch input (touch screen input means [touch screen]; column 2, line 16; column 3, line 25). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system and non-transitory, tangible computer readable storage medium of Baurmann to include wherein at least a portion of the screen is capable of receiving a touch input and the user input source is a touch input, as taught by Arling, because it is advantageous to have the ability to simplify remote input by utilizing touch screen and touch screen input commands.

Claim 20 lacks an inventive step under PCT Article 33(3) as being obvious over Baurmann in view of US 2009/0199237 A1 to WHITE, S. et al. (hereinafter 'White').

As per claim 20, Baurmann discloses the non-transitory, tangible computer readable storage medium of claim 16. However, Baurmann fails to disclose wherein at least one of the channel tiles in the second subset of channel tiles is associated with a channel that is currently playing a program containing recommended content. However, White discloses wherein at least one of the channel tiles in the second subset of channel tiles is associated with a channel that is currently playing a program containing recommended content (outputting program recommendations to user via display [recommended content tile]; figure 7; column 2, line 47). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the non-transitory, tangible computer readable storage medium of Baurmann to include wherein at least one of the channel tiles in the second subset of channel tiles is associated with a channel that is currently playing a program containing recommended content, as taught by White, because it is advantageous to automatically suggest personalized recommendations to television users for the purpose of increasing ease of use for television users.

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

REINHARDT, Dean, N.
SHERIDAN ROSS P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-479-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055278	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Philippe Bécamel

e-mail: pt03.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-479-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055278	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: DEAN N. REINHARDT
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	11 MAR 2014
Applicant's or agent's file reference 6583-479-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055278	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/00 (2014.01)
USPC - 725/46

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	17 February 2014	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055278

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055278

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-21	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-6, 10-13, 17, 18, 21 lack an inventive step under PCT Article 33(3) as being obvious over Angiolillo et al., hereinafter referred to as Angiolillo and in view of Hill et al., hereinafter referred to as Hill.

Regarding claims 1, 12, 17 Angiolillo discloses a non-transitory computer readable storage medium having stored thereon instructions that cause a processor to execute a method (the last application system 100 includes hardware [last application system is interpreted as comprising a processor] and software with tangible physical media capable of storing software [i.e. storage storing instructions], para.0014, 0015) of organizing applications on a television display (the last application system 100 displays one or more applications on display device 108 such as television, based on user inputs and request messages, para.0020, Fig.1), the method comprising the steps of:
[Claim 12] A television system (the network is a cable television network, para.0024; Fig.1 shows display device 108 [interpreted as television], Fig.1), comprising: a display (a display module 206 is configured to control display of last application information and/or various graphical user interfaces at the display device 108, para.0052); a memory (the system 100 includes memory for storing software, para.0015); a processor in communication with the memory and the display (the last application system 100 includes a display device 108, hardware [last application system is interpreted as comprising a processor] and software with tangible physical media capable of storing software [i.e. storage storing instructions for execution], para.0014, 0015), the processor operable to:
[Claim 17] A method for organizing applications on a television (the last application system 100 displays one or more applications on display device 108 such as television, based on user inputs and request messages, para.0020, Fig.1), the method comprising:
receiving input to activate an application center (the last application graphical user interface is displayed in response to a viewer request to view the last applications graphical user interface 400. The viewer may use the input device 112 to generate a request for the set top box 106 to cause the display of the last applications graphical user interface 400 at the display device 108 [receiving request to display applications interface is interpreted as receiving input to activate application center], para.0059, Fig.1, 4);
retrieving application usage information from a storage medium (the last applications system may output to the user one or more last applications based on usage data, para.0018; The priority module 212 may include software and hardware configured to prioritize one or more last applications based on usage data. Usage data may include data that indicates the amount of time a user viewed or accessed a last application, the amount of time that has past since a user has viewed or accessed a last application, the number of times a user has viewed or accessed a last application, and any other data that may be used to indicate last application usage, para.0041);
determining which applications to display based on the retrieved application usage information (the priority module 212 may select a finite number of last applications to be displayed in a scroll bar of last applications based on the usage data. Usage data may include data that indicates the amount of time a user viewed or accessed a last application, the amount of time that has past since a user has viewed or accessed a last application, the number of times a user has viewed or accessed a last application, and any other data that may be used to indicate last application usage, para.0041, 0042); and
displaying on the television display one or more applications in the application center (The viewer may use the input device 112 to select the "Last Applications Scroll Bar" request field 402 or the "Last Applications Menu" request field 406. When the user selects "Last Applications Scroll Bar", the viewer is displayed and allowed to access and view a finite number of last applications stored based on priority determined by the priority module 212. The viewer may use the input device 112 to select a desired last application by moving the indicator 606 next to the last application of interest, para.0060, 0065, 0066, Fig.4, 6; the priority module 212 may select a finite number of last applications to be displayed in a scroll bar of last applications based on the usage, para.0042).
[Claim 12] wherein the application usage information comprises at least one of a last used application, a second last used application, a most used application, a second most used application, a newest application, and a second newest application (one or more last applications are displayed to user based on the usage data [thus usage information is interpreted as comprising information of last used application]. Usage data may include data that indicates the amount of time a user viewed or accessed a last application, the number of times a user has viewed or accessed a last application, and any other data that may be used to indicate last application usage [i.e. last used application], para.0041, 0042).
Angiolillo lacks the teaching of displaying application icons in the application center.
Hill discloses an internet enabled TV listing various content genres (Abstract) and teaches application icons in the application center (Fig.2 shows various application icons such as a photograph icon 34, a music icon 36, a video icon 38, a TV icon 40, a game icon 42, and a network icon 44 presented on cross media bar (XMB) 32 [cross media bar is interpreted as the application center on which application icons are displayed], para.0023, 0024, Fig.2).
It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Hill for displaying application icons in application center in the invention of Angiolillo.
The motivation would have been to organize and present the applications to users in the form of icons (para.0023, Hill).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055278

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 2, Angiolillo teaches that the application usage information comprises at least one of a last used application; a second last used application; a most used application; a second most used application; a newest application; and a second newest application (one or more last applications are displayed to user based on the usage data [thus usage information is interpreted as comprising information of last used application]. Usage data may include data that indicates the amount of time a user viewed or accessed a last application, the number of times a user has viewed or accessed a last application, and any other data that may be used to indicate last application usage [i.e. last used application], para.0041, 0042).

Regarding claim 3, Angiolillo teaches receiving input to launch an application selected from the one or more applications displayed in the application center [interface] (When the user selects "Last Applications Scroll Bar", the viewer is displayed and allowed to access and view a finite number of last applications stored based on priority determined by the priority module 212 [i.e. one or more applications displayed in the application center]. The viewer may use the input device 112 to select a desired last application by moving the indicator 606 next to the last application of interest and the viewer may press an input key on the input device 112 to generate a select message requesting that the set top box 106 access and display the last application associated with the request [i.e. receiving input to access or launch selected application from the one or more applications], para.0065, 0066, Fig.6); and launching the application selected (A user can access and view one or more last applications outputted by the last applications system [user accessing and view the last application is interpreted as last application system launching the user selected application], para.0019; the display module 206 receive instructions from the input device 112, and retrieves and tune to a particular last application based on the received instructions, and causes display of the particular last application at the display device 108 [i.e. launching selected application], para.0052).
Angiolillo lacks the teaching of application icons displayed in the application center.
Hill teaches application icons displayed in the application center (Fig.2 shows various application icons such as a photograph icon 34, a music icon 36, a video icon 38, a TV icon 40, a game icon 42, and a network icon 44 presented on cross media bar (XMB) 32 [cross media bar is interpreted as the application center on which application icons are displayed], para.0023, 0024, Fig.2).
It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Hill for displaying application icons in application center in the invention of Angiolillo.
The motivation would have been to organize and present the applications to users in the form of icons (para.0023, Hill).

Regarding claims 4, 13, 18 Angiolillo teaches receiving input for information about an application (upon receiving a request message from the user via the input device [i.e. receiving input], the update data associated with one or more last applications is displayed at the display device 108. Update data includes video data, audio data, text data, and/or other types of visual and/or audible information [update data is interpreted as the information about the application], para.0022) selected from the one or more applications displayed in the application center [interface] (The viewer may use the input device 112 to select a desired last application by moving the indicator 606 next to the last application of interest and the viewer may press an input key on the input device 112 to generate a select message requesting that the set top box 106 access and display the last application associated with the request [i.e. selecting application from the one or more applications in the last applications scroll bar GUI wherein last applications scroll bar GUI is interpreted as the application center], para.0066, Fig.6); retrieving application information about the selected application (upon receiving a request message from the user via the input device, the update data associated with one or more last applications is accessed and retrieved from the server 102 and displayed at the display device 108. Update data includes video data, audio data, text data, and/or other types of visual and/or audible information, para.0022); and displaying on the television display the retrieved application information (The display module 206 may include software and/or hardware configured to control display of last application information such as visual and audible representation of one or more last applications, para.0052) in an information panel (Fig.6 shows a rotatable scroll bar 602 displaying information about last applications [rotatable scroll bar is interpreted as the information panel displaying application information such as name and category], para.0066, Fig.6).
Angiolillo lacks the teaching of application icons displayed in the application center.
Hill teaches application icons displayed in the application center (Fig.2 shows various application icons such as a photograph icon 34, a music icon 36, a video icon 38, a TV icon 40, a game icon 42, and a network icon 44 presented on cross media bar (XMB) 32 [cross media bar is interpreted as the application center on which application icons are displayed], para.0023, 0024, Fig.2).
It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Hill for displaying application icons in application center in the invention of Angiolillo.
The motivation would have been to organize and present the applications to users in the form of icons (para.0023, Hill).

Regarding claims 5, 21 Angiolillo teaches receiving input to launch the application displayed in the information panel (Fig.6 shows a rotatable scroll bar 602 displaying information about last applications [rotatable scroll bar is interpreted as the information panel displaying application information such as name and category]. The viewer may use the input device 112 to select a desired last application by moving the indicator 606 next to the last application of interest and the viewer may press an input key on the input device 112 to generate a select message requesting that the set top box 106 access and display the last application associated with the request [i.e. receiving input to access or launch selected application from the one or more applications], para.0066, Fig.6); and launching the application (A user can access and view one or more last applications outputted by the last applications system [user accessing and view the last application is interpreted as last application system launching the user selected application], para.0019; the display module 206 receive instructions from the input device 112, and retrieves and tune to a particular last application based on the received instructions, and causes display of the particular last application at the display device 108 [i.e. launching selected application], para.0052).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055278

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claim 6, Angiolillo teaches that the application information comprises at least one of a thumbnail; a name; a description; a version; a revision date; a developer name; a category name; a user rating; and a content rating (Fig.6 shows a rotatable scroll bar 602 displaying information about last applications including name and category, para.0066, Fig.6; the last applications scroll bar graphical user interface 600 may display one or more images of one or more last applications. For example, the last applications scroll bar graphical user interface 600 may display the last frame viewed of a VOD Movie, the image of a Chat Session, the current image of a TV Channel broadcast program, etc. [i.e. displaying thumbnail], para.0067).

Regarding claim 10, Angiolillo lacks the teaching wherein if the selected application icon is a widget icon, retrieving widget information from a storage medium; determining which widgets to display based on the retrieved widget information; and displaying on the television display one or more widgets in a widget panel.
Angiolillo however teaches determining which applications to display based on the retrieved information (the priority module 212 may select a finite number of last applications to be displayed in a scroll bar of last applications based on the usage data. Usage data may include data that indicates the amount of time a user viewed or accessed a last application, the amount of time that has past since a user has viewed or accessed a last application, the number of times a user has viewed or accessed a last application, and any other data that may be used to indicate last application usage, para.0041, 0042); and displaying on the television display one or more applications in a panel (Fig.6 shows a rotatable scroll bar 602 [rotatable scroll bar is the panel] displaying last applications, para.0066, Fig.6).
Hill teaches application as widget icons (Widgets includes application such as clocks, event countdowns, auction-tickers, stock market tickers, flight arrival information, daily weather etc. Widget icon can be selected to display the selected widget on the display, para.0035, Fig.5); retrieving widget information (by hovering the cursor over weather widget icon, current weather information is provided by weather widget through the network interface, para.0041) from a storage medium (TV processor 18 can access one or more storage media 20 for retrieving information, para.0021, Fig.1); and displaying one or more widgets on television display (one or more widget icons are displayed on the display, para.0035, Fig.5).
It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Hill for incorporating widget icons in the invention of Angiolillo.
The motivation would have been for representing applications in a different form such as widgets as per user desire.

Regarding claim 11, Angiolillo teaches identifying a user associated with the request (a request module 210 receives one or more request messages to display and access one or more last applications. The system identifies each requesting user, as each user of the household has separate login identification and password, para.0050, 0038);
wherein the retrieved application usage information is associated with the identified user (each user of the household may be associated with a separate last application user profile indicating one or more last applications associated with that user. Once the set top box 106 receives login information and password associated with a particular user, the set top box 106 can store and retrieve the last application data associated with the user separate from other last application data associated with other users, para.0038).

Claims 7-9, 14-16, 19, 20 lack an inventive step under PCT Article 33(3) as being obvious over Angiolillo in view of Hill and in view of De Heer et al., hereinafter referred to as De Heer.

Regarding claims 7, 14, 19 Angiolillo teaches the information panel including a first list of one or more applications (Fig.6 shows a rotatable scroll bar 602 displaying information about last applications [rotatable scroll bar is interpreted as the information panel displaying list of applications with information such as name and category], para.0066, Fig.6) but lacks the teaching of recommended applications.
De Heer discloses generating video-on-demand recommendations based on television history data (Abstract) and teaches recommending applications (one or more lists of recommended VOD titles are displayed to user, col.6, lines 14-22, Fig.3, 4).
It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of De Heer for displaying recommendations in the invention of Angiolillo.
The motivation would have been for automatically generating recommendation to user based on user history (col.1, lines 46-56, De Heer).

Regarding claim 8, Angiolillo lacks the teaching of receiving a selection of a recommended application displayed in the first list; and connecting to an application store to purchase or rent the selected recommended application.
De Heer teaches of receiving a selection of a recommended application displayed in the first list (one or more lists of recommended VOD titles are displayed to user. The user selects one of the displayed recommended titles (e.g., "8 Mile") and a description of the VOD content is displayed in the description area 418 of the user interface, col.6, lines 14-22, 47-50, Fig.3, 4); and connecting to an application store to purchase or rent the selected recommended application (the user selects the purchase button 420 and a VOD purchase process is initiated for the title that is currently selected. Upon selecting the purchase button, VOD purchase application 220 is launched [launching application is interpreted as connecting to application store for purchasing recommendation], col.6, lines 51-55, Fig.4, 5, 6).
It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of De Heer for selecting and purchasing displayed recommendation in the invention of Angiolillo.
The motivation would have been allowing users to view and access recommended programs.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055278

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claims 9, 15, 20 Angiolillo lacks the teaching of receiving input to list more recommended applications; and displaying on the television display a second list of one or more recommended applications in a recommended application panel.
De Heer teaches receiving input to list recommended applications (Fig.3 shows a user interface 302 through which user may request VOD recommendations. The user can select the VOD recommendations button 306 to cause one or more lists of recommended titles to be displayed, col5, lines 62-64, col.6, lines 14-16, Fig.3); and displaying on the television a list of one or more recommended applications in a recommended application panel (The VOD recommendations button 306, when selected, causes one or more lists of recommended VOD titles to be displayed. a viewer may be presented with three types of recommendations, represented by the recommendations tab 402, the critics' picks tab 404, and the last chance tab 406, col.6, lines 14-16, 26-28, Fig.4).
Furthermore, requesting more recommendations was a well-known practice in the art and the specifics would have been a matter of design choice.
It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of De Heer for requesting and listing requested recommendations and providing more recommendations in the invention of Angiolillo.
The motivation would have been for allowing users to view and access more recommendations that can be purchased.

Regarding claim 16, Angiolillo teaches receiving input to launch the application displayed in the information panel (Fig.6 shows a rotatable scroll bar 602 displaying information about last applications [rotatable scroll bar is interpreted as the information panel displaying application information such as name and category]. The viewer may use the input device 112 to select a desired last application by moving the indicator 606 next to the last application of interest and the viewer may press an input key on the input device 112 to generate a select message requesting that the set top box 106 access and display the last application associated with the request [i.e. receiving input to access or launch selected application from the one or more applications], para.0066, Fig.6); and launching the selected application (A user can access and view one or more last applications outputted by the last applications system [user accessing and view the last application is interpreted as last application system launching the user selected application], para.0019; the display module 206 receive instructions from the input device 112, and retrieves and tune to a particular last application based on the received instructions, and causes display of the particular last application at the display device 108 [i.e. launching selected application], para.0052).

Claims 1-21 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

GRUBER, Kristen
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-481-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055509	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Lingfei Bai

e-mail: pt02.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-481-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055509	International filing date *(day/month/year)* 19 August 2013 (19.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Lingfei Bai e-mail: pt02.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Kristen Gruber
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	08 NOV 2013
Applicant's or agent's file reference 6583-481-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55509	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445, 71/73; G06F 13/14 (2013.01)
USPC - 725/43, 45, 47

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [X] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	30 October 2013 (30.10.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55509

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

   ☐ on paper

   ☐ in electronic form

   b. (time)

   ☐ in the international application as filed

   ☐ together with the international application in electronic form

   ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55509

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	2, 3, 8, 10, 12, 13, 18, 20	YES
	Claims	1, 4-7, 9, 11, 14-17, 19, 21, 22	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-22	NO
Industrial applicability (IA)	Claims	1-22	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1, 4-7, 9, 11, 14-17, 19, 21 and 22 lack novelty under PCT Article 33(2) as being anticipated by US 7,900,228 B2 to Stark et al. (hereinafter 'Stark').

As per claims 1, 11 and 21, Stark discloses a method of displaying content on a television, a non-transitory computer readable information storage medium having stored thereon instructions that cause a computing system to execute a method of displaying content on a television, and a system for displaying content on a television (a graphical user interface ("GUI") for a content management system is provided, such as to present television program information and/or information associated with other forms of multimedia content; abstract; figure 1; column 2, lines 41-50; column 5, lines 48-64), comprising: receiving an indication associated with a selection by a user (one or more users may make various types of selections that affect the information being displayed; abstract; column 2, lines 51-56); determining, based on the received indication, a global panel to display via the television (in some situations various techniques are employed to maintain a state of the GUI (global panel) that is focused on one or more current selections as changes occur, such as to coordinate information display between multiple distinct information panes or other view areas of the GUI, to alter the information to be displayed in the GUI based on a selected piece of content, and/or to enable identification of a selected piece of content from within a large number of pieces of content; abstract; column 2, lines 51-61); retrieving from memory, a first content information for display in the global panel (the computing system 300 interacts with the media center 350 in a variety of ways (e.g., via a direct connection, as part of local network 385, or as part of another network, not shown), including to receive information about current and/or future television programming related content 360a and/or other content 360a; in the illustrated embodiment, the computing system includes a CPU 305 or other processor(s), various I/O devices 310, storage 320, and memory 330, and the illustrated I/O devices include a display 311, a network connection 312, a computer-readable media drive 313, and other I/O devices 315; an embodiment of the CM system 335 is executing in memory 330; the CM system provides information about the available content to one or more users (e.g., one or more of the consumers in the home environment), such as via a GUI (global panel) that is displayed on the display device 311 and/or on one or more of the content presentation devices 370 or 380 or other computing systems 390; figure 1; column 6, lines 3-38); and displaying, via the television, the retrieved content information in the specified global panel (the home environment includes an STB or other media center 350 receiving external content 360a that is available to one or more consumers in the home environment 395, such as television programming-related content 360a for presentation on a television 370; in the illustrated embodiment, the CM system does not itself present the external content 360a to the user(s), instead interacting with the media center 350 to control the display of the content to the user via the TV and/or one or more of the other content presentation devices; figure 1; column 2, lines 41-64; column 5, lines 53-58; column 6, lines 31-38, 58-62).

As per claims 4 and 14, Stark discloses the method of claim 1 and the non-transitory computer-readable medium of claim 11, further comprising: receiving a second indication associated with a selection by a user (the primary content-type navigation tab for "Television" 110a (the first indication) continues to be currently selected, the secondary content type-specific navigation tab for "Live TV" 115a (second indication) continues to be currently selected; figure 3; column 10, lines 11-24); determining, based on the second indication, a source of content information to be displayed in the global panel (click the Guide View button to display a TV Guide-like grid of program bubbles; click the arrow next to the Guide View button to display the menu; figure 3; column 42, lines 15-35) based; retrieving at least a portion of content information from the determined source (menu selections are small, medium, or large; if you select Small, the program bubbles in the TV grid will show only the program title; by selecting Medium, the program bubbles expand to display information about the programs; by selecting Large, the program bubbles expand to display the maximum amount of information about the programs; figure 3; column 42, lines 15-40); and displaying, via the television, the content information associated with the determined source (the GUI is displaying program listing information for live TV in a view area 140; figures 2, 3; column 9, lines 34-37; column 10, lines 11-24).

As per claim 5, Stark discloses the method of claim 1, wherein the global panel comprises information from at least two different panel types (in some situations, the GUI (global panel) displays various types of information about multiple pieces of content that are currently appropriate for display, such as based on those pieces of content having presentation times or other associated times that correspond to a currently selected time period and/or based on those pieces of content having other appropriate characteristics; as one example, in at least some embodiments the metadata information displayed in a single view area for multiple pieces of content may be displayed using different types of views; abstract; column 2, lines 65-67 to column 3, lines 1-66).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55509

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Defect: Claims Defective:

Claims 4 and 14 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: the word "based" in line 4 of claim 4, and line 5 of claim 14, should be stricken.

Claim 16 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect in the form or contents thereof: claim 16 should depend on claim 11 instead of claim 1.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55509

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Box V: Citations and Explanations-***-

As per claims 6, 16 and 22, Stark discloses the method of claim 1, the non-transitory computer-readable medium of claim 11, and the system of claim 21, further comprising: identifying at least one of a content source and a content information currently being displayed via a television (in at least some embodiments the CM system GUI displays information such that a state of the GUI is focused based on one or more current selections; for example, in some embodiments one or more pieces of content may be currently selected (e.g., based on one or more prior selections by a user), and if so, at least portions of the GUI may be focused to reflect those currently selected pieces of content, such as by simultaneously displaying various types of information related to the currently selected pieces of content in a coordinated manner in multiple distinct display areas of the GUI; column 4, lines 5-24); selecting a panel type based on the identified at least one of content source and content information currently being displayed via the television (in addition, when such information in one or more such display areas of the GUI changes, the changed information may also be displayed in such a manner as to include or emphasize a currently selected piece of content on which the GUI state is focused (e.g., when possible, such as when the changed information includes information for the currently selected piece of content, or instead always, such as to cause information for the currently selected piece of content to be included in the changed information); column 4, lines 53-61); retrieving, from memory, content information based on the selected panel type (an embodiment of the CM system 335 is executing in memory 330; the CM system may, for example, provide some or all of the stored content metadata 322 to the users and allow the user to manipulate the content in a variety of ways (e.g., to select content for current presentation, for future recording, etc.), as well as in some embodiments maintaining a state of the GUI as displayed information changes; column 6, lines 31-43); and displaying, via the television, the retrieved content information in the global panel based on the selected panel type (the CM system displays information about the retrieved content via a GUI (global panel) on a display device 370 (television), content presentation devices 380, or computing system 390; column 5, lines 48-64; column 6, lines 31-67 to column 7, line 1).

As per claims 7 and 17, Stark discloses the method of claim 6 and the non-transitory computer-readable medium of claim 16, further comprising: receiving a second indication associated with a selection by a user (the primary content-type navigation tab for "Television" 110a (the first indication) continues to be currently selected, the secondary content type-specific navigation tab for "Live TV" 115a (second indication) continues to be currently selected; figure 3; column 10, lines 11-24); selecting a panel type based on the second indication (the user clicks the LIVE TV tab 115a (panel type); figure 3; column 10, lines 21-23; column 42, lines 15-30); retrieving, from memory, content information based on the selected panel type and the second indication (an embodiment of the CM system is executing in memory 330; the CM system may, for example, provide some or all of the stored content metadata 322 to the users and allow the user to manipulate the content in a variety of ways (e.g., to select content for current presentation, for future recording, etc.), as well as in some embodiments maintaining a state of the GUI as displayed information changes; multimedia content metadata is received, such as if the computing system 300 receives EPG metadata information (i.e., as part of television programming-related content 360a) from a head-end and stores the information as content metadata 322 in the storage unit 320; column 6, lines 31-43; column 24, lines 31-36); and displaying, via the television, the retrieved content information in the global panel (when the user clicks the LIVE TV tab, the Navigation tabs Guide View screen appears and the GUI is rendered on a suitable display device; figure 3; column 24, lines 36-40; column 42, lines 15-30).

As per claims 9 and 19, Stark discloses the method of claim 7 and the non-transitory computer-readable medium of claim 17, wherein the retrieved content information comprises information associated with content information recently viewed (the information area 165 includes information about the current status of selected content, including content being currently recorded (if any), recently recorded programs, and upcoming scheduled recordings; figure 16; column 16, lines 60-67 to column 17, lines 1-6).

As per claim 15, Stark discloses the non-transitory computer-readable medium of claim 11, further comprising retrieving from memory a second content information for display in the global panel (receiving metadata information for multiple television programs (first and second content information); identifying a first distinct group of the multiple television programs for a graphical user interface such that received meta data information for the first distinct group of television programs will be included in the graphical user interface, the first distinct group including multiple television programs that satisfy a search request of television programs and that are identified based at least in part on a corresponding first category of television programs; claim 1); and displaying, via the television, the retrieved first content information and the retrieved second content information in the specified global panel (displaying to a user of the computing device a graphical window that includes the graphical user interface, the graphical user interface having a state based at least in part on the identified group, the displayed graphical user interface having: multiple distinct display areas including a first display area and a second display area, such that metadata information for a first portion of the identified first distinct group of television programs is displayed in the first display area and metadata information for a selected television program is displayable in the second display area; claim 1).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55509

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
-***-Continued from Previous Supplemental Box-***-

Claims 2, 3, 12 and 13 lack an inventive step under PCT Article 33(3) as being obvious over Stark in view of US 8,166,511 B2 (GRIGGS).

As per claims 2 and 12, Stark discloses the method of claim 1 and the non-transitory computer-readable medium of claim 11. Stark does not disclose further comprising: identifying a user associated with the received indication; retrieving one or more settings associated with the identified user; retrieving, from memory, content information associated with the identified user; and displaying, via the television, the retrieved content information in the specified global panel. Griggs does disclose further comprising: identifying a user associated with the received indication (according to a preferred embodiment of the instant invention, an authorized user may access their account on the system server by a log-in process, whereby the user provides a unique user identification to identify themselves as an authorized user to the system; column 2, lines 50-54; claim 1); retrieving one or more settings associated with the identified user (once into the account, the user can preferably modify user preferences and preferably view other account information; column 2, lines 54-56; claim 1); retrieving, from memory, content information associated with the identified user (when a request is submitted from the control device 12, the display logic 16 creates a graphical display frame in its memory with the appropriate content; the display frame is sent to the streaming media mixer logic 13; figure 9; column 9, lines 62-65); and displaying, via the television, the retrieved content information in the specified global panel (the streaming media mixer logic 13 compresses the new combined display frame and sends the combine display frame to the viewing device 25; figure 9; column 9, lines 65-67 to column 10, lines 1-9). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of Stark with Griggs's teaching, because by doing so, Stark's content management system would have provided for programming that is tailored to individual consumers needs, and provide the flexibility for consumers to quickly change the scope of services and/or program availabilities.

As per claims 3 and 13, Stark discloses the method of claim 1 and the non-transitory computer-readable medium of claim 11. Stark does not disclose further comprising: identifying a user associated with the received indication; retrieving, from memory, one or more settings associated with the identified user; retrieving, from memory, content information associated with the identified user and the one or more settings associated with the user; and displaying, via the television, the retrieved content information in the specified global panel. Griggs does disclose further comprising: identifying a user associated with the received indication (according to a preferred embodiment of the instant invention, an authorized user may access their account on the system server by a log-in process, whereby the user provides a unique user identification to identify themselves as an authorized user to the system; column 2, lines 50-54; claim 1); retrieving, from memory, one or more settings associated with the identified user (once into the account, the user can preferably modify user preferences and preferably view other account information; column 2, lines 54-56; claim 1); retrieving, from memory, content information associated with the identified user and the one or more settings associated with the user (granting access to the user account via the Internet; selecting the customized programming schedule from a plurality of customized programming schedules based on a determination that the separate device corresponds to the device indicator; transmitting, to the separate device, display data for displaying the customized programming schedule; column 9, lines 62-67 to column 10, lines 1-9; claim 1); and displaying, via the television, the retrieved content information in the specified global panel (the streaming media mixer logic 13 compresses the new combined display frame and sends the combine display frame to the viewing device 25; receiving, from the separate device, a selection signal for selecting one of the plurality of digital video programs; figure 9; column 9, lines 65-67 to column 10, lines 1-9; claim 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of Stark with Griggs's teaching, because by doing so, Stark's content management system would have provided for programming that is tailored to individual consumers needs, and provide the flexibility for consumers to quickly change the scope of services and/or program availabilities.

Claims 8, 10, 18 and 20 lack an inventive step under PCT Article 33(3) as being obvious over Stark in view of US 7,685,520 B2 to Rashkovskiy et al. (hereinafter 'Rashkovskiy').

As per claims 8 and 18, Stark discloses the method of claim 7 and the non-transitory computer-readable medium of claim 17. Stark does not disclose wherein the retrieved content information comprises information associated with content information marked as favorite. Rashkovskiy does disclose wherein the retrieved content information comprises information associated with content information marked as favorite (a graphical user interface 10 for implementing an electronic content guide includes a plurality of selectable category icons 12 represented as "virtual" file folders; each category icon 12 may be predefined or may be user definable; category icon 12a is provided for favorite programs; figure 1; column 1, lines 63-67 to column 2, line 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention, to modify Stark's system and method with Rashkovskiy's user interface, because by doing so, Stark's platform would have been more user-friendly by enabling viewers to save a specific channel by marking it as a favorite.

As per claims 10 and 20, Stark discloses the method of claim 7 and the non-transitory computer-readable medium of claim 17. Stark does not disclose wherein the retrieved content information comprises information associated with content information marked as favorite and further comprises information associated with content information recently viewed. Rashkovskiy does disclose wherein the retrieved content information comprises information associated with content information marked as favorite and further comprises information associated with content information recently viewed (a graphical user interface 10 for implementing an electronic content guide includes a plurality of selectable category icons 12 represented as "virtual" file folders; each category icon 12 may be predefined or may be user definable; category icon 12a is provided for favorite programs; a plurality of programs 22 are listed as entries in two columns 20a and 20b; these programs 22 are either currently in progress or just beginning, in keeping with the selection of currently available programs, through the icon 12c, and favorites among currently available programs through the selection of the icon 14; thus, the X-Files program 22, runs from 7:00 to 9:00 as indicated by the indicia 18 and 19; the bar indicia 19 graphically indicates how much of the program has already been displayed or broadcast in the past using differently color indicia 18 and 19; figure 1; column 1, lines 63-67 to column 2, line 1; column 2, lines 53-63). It would have been obvious to a person of ordinary skill in the art at the time of the invention, to modify Stark's system and method with Rashkovskiy's user interface, because by doing so, Stark's platform would have been more user-friendly by enabling viewers to save a specific channel by marking it as a favorite, and a user would have been able to determine the program timing to determine how much of the program is left to view, and how much was missed.

Claims 1-22 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

ADVANCE E-MAIL

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:

LIU, SHEN & ASSOCIATES
10th Floor, Building 1, 10 Caihefang Road, Haidian District
Beijing 100080
CHINE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference F13W4862	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/CN2013/081639	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Lingfei Bai

e-mail: pt02.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference F13W4862	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/CN2013/081639	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Lingfei Bai e-mail: pt02.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

100101

A0601,Huibin Building No.8,Beichen Dong(East) Street Chao Yang District Beijing,China

LIU，SHEN&ASSOCIATES

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43 *bis*.1)

Date of mailing *(day/month/year)*	28 Nov. 2013 (28.11.2013)
Applicant's or agent's file reference: F13W4862	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/CN2013/081639	16 Aug. 2013(16.08.2013)	17 Aug. 2012(17.08.2012)

International Patent Classification (IPC) or both national classification and IPC

H04N 5/445 (2011.01) i

Applicant

FLEXTRONICS AP, LLC et al.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No.II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No.VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No.VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of **3** months from the date of mailing of Form PCT/ISA/220 or before the expiration of **22** months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/CN	Date of completion of this opinion	Authorized officer
The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451	14 Nov. 2013 (14.11.2013)	GAO,Jing Telephone No. (86-10)010-62413457

Form PCT/ISA/237(cover sheet)(July 2009)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CN2013/081639

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.
   ☐ a translation of the international application into _____ , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91(Rule 43bis.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application ,this opinion has been established on the basis of :

   a. a sequence listing filed or furnished

      ☐ on paper
      ☐ in electronic form

   b. time of filing or furnishing

      ☐ contained in the applicant as filed
      ☐ filed together with the application in electronic form
      ☐ furnished subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CN2013/081639

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement:

Novelty (N)	Claims	1-20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations

Reference is made to the following documents:
D1: CN 101540850 A (SHENZHEN TCL NEW TECHNOLOGY LTD.) 23 Sep. 2009 (23.09.2009)
D2: CN 101567992 A (ALI CORP.) 28 Oct. 2009 (28.10.2009)

I. Novelty and Inventive step

I.1 Independent claim 1 relates to a method. D1 (see page 3, lines 4-9, lines 14-15, lines 20-21, page 4, lines 1-4, page 5, lines 19-22 in the description, figures 1, 2, 5) is regarded as the closest prior art, and discloses a method for selecting media source as follows.

The electronic device 100 comprises at least one receptor 102 (e.g., a cable inlet, device inlet, or an antenna), a tuner 104, a processor 106, a memory 108, a display 110, a controller 112 (e.g., remote control), and various peripheral inputs 114,116, and 118. The memory 108 may comprise a tangible machine-readable medium adapted to hold machine-readable computer code that causes the processor 106 to perform an exemplary method in accordance with present embodiments. For example, the memory 108 and the processor 106 may cooperate to operate as a control system that provides an on-screen selection interface (corresponding to "reminder") in accordance with present embodiments (see page 3, lines 4-9 in the description and figure 1 of D1).

This UI or on-screen selection interface may be referred to as a tab-based content source selection system (TCSSS) (see page 3, lines 14-15 in the description of D1).

An interpreted "content" command from a remote control may initiate or activate the TCSSS on a television (corresponding to "receiving a reminder presentation input at the intelligent TV") (see page 3, lines 20-21 in the description of D1).

The TCSSS may provide several graphic items that appear to be overlapping graphical shapes (e.g., columns or tabs) on the television display 110. For example, FIG. 2 illustrates a screen 200 (corresponding to "the first portion of the display") of a television display (e.g., the display 110) that includes a menu 202 positioned on an edge of the display (corresponding to "the second portion of the display, wherein the second portion of the display at least partially overlaps the first portion"). The menu 202 includes four overlapping columns in accordance with present embodiments (see page 4, lines 1-4 in the description and figure 2 of D1).

FIG. 5 is an illustration of the TCSSS when the fourth column 210 is active. As set forth above, the fourth column 210 displays user-selected channels referred to as "favorites" when it is active. The fourth column 210 of the illustrated embodiment enables users to define it to include any source of input and any channel on a single menu tab (corresponding to "the reminder presentation dialog includes information relative to a specific program"). This will enable a user to conveniently switch between favorite channels and favorite sources of input within a single menu tab or column (see page 5, lines 19-22 in the description and figure 5 of D1).

D1 does not disclose the following features of claim 1: TV content presented to a first portion of the display. Thus D1 does not disclose all the features of claim 1 and the subject matter of claim 1 is new in the sense of PCT Article 33(2).

However, D2 (see page 5, lines 27-30 in the description) provides a method for displaying assistance data and discloses the following features: when digital channel content is broadcast, assistance information is displayed to a portion the screen 400. That is, D2 gives the teach to display TV content in a first portion and to display reminding assistance information in a second portion which overlaps the first portion. Thus, it is obvious for a person skilled in the art to apply the teaching of the D2 to D1 and arrive at this solution. Therefore the solution of claim 1 does not involve an inventive step, and does not meet the criteria set out in PCT Article 33(3).

VIZIO Ex. 1002, Page 3395 of 3573
VIZIO v. MMT, IPR2024-00722

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**

Continuation of : Box No. V Citations and explanations

I.2 Independent claim 13 relates to a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor, performed the method as the same as claim 1. D1 (see page 3, lines 7-8 in the description) also discloses that: The memory 108 may comprise a tangible machine-readable medium adapted to hold machine-readable computer code that causes the processor 106 to perform an exemplary method in accordance with present embodiments. Thus, referring to the explanations on claim 1, claim 13 is also new in the sense of PCT Article 33(2), and does not involve an inventive step in the sense of PCT Article 33(3).

I.3 Since the subject matter of claims 1, 13 involves novelty, the subject matter of their dependent claims 2-12, 14-19 also involves novelty in the sense of PCT Article 33(2).

Additional features of claims 2, 14 are also disclosed by D1(see page 5, lines 19-22 in the description and figure 5). Thus the subject matter of claims 2, 14 does not involve an inventive step in the sense of PCT Article 33(3).

Additional features of claims 3-12, 15-19 only relate to normal implementation measures or minor design details in the art. The features thus, either alone or in combination, do not seem to add anything of inventive significance to any of claims 3-12, 15-19, and they do not meet the criteria set out in PCT Article 33(3).

I.4 Independent claim 20 relates to a system. D1 (see page 3, lines 4-9, lines 14-15, lines 20-21, page 4, lines 1-4, page 5, lines 19-22 in the description, figure 1, 2, 5) is regarded as the closest prior art, and discloses a system for selecting media source as follows.

The electronic device 100 comprises at least one receptor 102 (e.g., a cable inlet, device inlet, or an antenna), a tuner 104, a processor 106, a memory 108, a display 110, a controller 112 (e.g., remote control), and various peripheral inputs 114,116, and 118. The memory 108 may comprise a tangible machine-readable medium adapted to hold machine-readable computer code that causes the processor 106 to perform an exemplary method in accordance with present embodiments. For example, the memory 108 and the processor 106 may cooperate to operate as a control system that provides an on-screen selection interface (corresponding to "reminder") in accordance with present embodiments (see page 3, lines 4-9 in the description and figure 1 of D1).

This UI or on-screen selection interface may be referred to as a tab-based content source selection system (TCSSS) (see page 3, lines 14-15 in the description of D1).

An interpreted "content" command from a remote control may initiate or activate the TCSSS on a television (corresponding to "receiving a reminder presentation input at the intelligent TV") (see page 3, lines 20-21 in the description of D1).

The TCSSS may provide several graphic items that appear to be overlapping graphical shapes (e.g., columns or tabs) on the television display 110. For example, FIG. 2 illustrates a screen 200 (corresponding to "the first portion of the display") of a television display (e.g., the display 110) that includes a menu 202 positioned on an edge of the display (corresponding to "the second portion of the display, wherein the second portion of the display at least partially overlaps the first portion"). The menu 202 includes four overlapping columns in accordance with present embodiments (see page 4, lines 1-4 in the description and figure 2 of D1).

FIG. 5 is an illustration of the TCSSS when the fourth column 210 is active. As set forth above, the fourth column 210 displays user-selected channels referred to as "favorites" when it is active. The fourth column 210 of the illustrated embodiment enables users to define it to include any source of input and any channel on a single menu tab (corresponding to "the reminder presentation dialog includes information relative to a specific program"). This will enable a user to conveniently switch between favorite channels and favorite sources of input within a single menu tab or column (see page 5, lines 19-22 in the description and figure 5 of D1).

D1 does not disclose the following features of claim 20: (1) the tuner is configured to receive and convert broadcast content signals to be displayed by the display; (2) TV content presented to a first portion of the display. Thus D1 does not disclose all the features of claim 20 and the subject matter of claim 20 is new in the sense of PCT Article 33(2).

However, the aforementioned feature (1) is common design in the art. As for feature (2), D2 (see page 5, lines 27-30 in the description) provides a method for displaying assistance data and discloses the following features: when digital channel content is broadcast, assistance information is displayed to a portion the screen 400. That is, D2 gives the teach to display TV content in a first portion and to display reminding assistance information in a second portion which overlaps the first portion. Thus, it is obvious for a person skilled in the art to apply the teaching of the D2 and common desigh in the art to D1 and arrive at this solution. Therefore the solution of claim 20 does not involve an inventive step, and does not meet the criteria set out in PCT Article 33(3).

II. Industrial applicability

The invention of claims 1-20 can find industrial applicability in the technical field of TV broadcast, and meets the criteria set out in PCT Article 33(4).

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

PEARSON, Kendria, E.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-488-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055303	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Kihwan Moon
Facsimile No. +41 22 338 82 70	e-mail: pt01.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-488-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055303	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: KENDRIA E. PEARSON
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	05 DEC 2013

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-488-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055303	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/173 (2013.01)
USPC - 725/27

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	11 November 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055303

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055303

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	None	YES
	Claims	1-20	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

See Supplemental Box

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055303

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by Yu et al., hereinafter referred to as Yu.

Regarding claims 1, 10, 16, Yu discloses a method for displaying content on a television (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows a method for the user to access television content items via a TV portal, abstract, para 0115, 0122), a non-transitory computer readable information storage medium having stored thereon instructions that cause a computing system to execute a method of displaying content on a television [claim 10] (the computer system 5600 includes a display, and the disk drive unit 5616 includes a non-transitory machine readable medium 5622 and stored on it are instructions and data e.g, software 5624 in a memory 5604 within the processor 5602 executed by the computer system, para 0228, 0229), a system for displaying content on a television, comprising: an input device associated with the television, a memory, and a microprocessor operable [claim 16] (the computer system 5600 includes a display, and the disk drive unit 5616 includes a non-transitory machine readable medium 5622 and stored on it are instructions, para 0228, 0229; figs 17, 18 & 20 shows a method wherein the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired TV content item [receiving a first directional input], para 0115, 0122) comprising: receiving a first directional input via an input device associated with the television (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user access television content items via a TV portal, the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired TV content item [receiving a first directional input], para 0115, 0122; fig. 18 displays a content listing area 1820 [screen channel changer/ electronic program guide] which lists the available contents with the time slots which includes the programming channels, which the users can highlights/select a particular content using an input device which upon selection delivers the content, para 0119, 0123); determining, based on a first direction associated with the first directional input, a content panel to display via the television (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [a content panel to display via the television] as shown in fig.21, para 0122); retrieving, from a memory, a first content information for displaying in the content panel (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed interpreted as first content information for displaying in the content panel] as shown in fig.21, para 0122; fig.6 shows a data processor 111 causes the provision module 117 to retrieve the contents from the assets stored within the service provider database 112 and makes the content accessible to the interface device 644 [interpreted as retrieving, from a memory, a content information for displaying in the content panel] via the network 120, para 0060); identifying at least one of a content source and a second content information currently being displayed via the television (the display 2100 displays the button 2114, the button 2114 "Cast & Crew" being selected by the user [selecting by the user is interpreted as identifying the content source] upon which displays the screen 2200 of fig.22, para 0125); selecting a panel type based on the identified at least one of content source and second content information currently being displayed via the television (upon the user selecting the option of 2114 "Cast & Crew" [content source] on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 related to the selected content item in this case is "Lost" television program [displaying the 2200 page which is square shaped panel including the contents 2222 upon the user selecting the 2114 is interpreted as selecting a panel type based on the identified content source], para 0125); retrieving, from memory, a third content information based on the selected panel type (upon the user selecting the option of 2114 "Cast & Crew" on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 [third content information] related to the selected content item in this case is "Lost" television program [displaying the 2200 page which is square shaped panel including the contents 2222 upon the user selecting the 2114 is interpreted as selecting a panel type based on the identified content source], para 0125; fig.6 shows a data processor 111 causes the provision module 117 to retrieve the contents from the assets stored within the service provider database 112 and makes the content accessible to the interface device 644 [interpreted as retrieving, from a memory, a content information for displaying in the content panel] via the network 120, para 0060); and displaying, via the television, the retrieved first content information and the third content information in the content panel based on the selected panel type (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed interpreted as first content information for displaying in the content panel] as shown in fig.21, para 0122; upon the user selecting the option of 2114 "Cast & Crew" on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 [third content information] related to the selected content item in this case is "Lost" television program [displaying the 2200 page which is square shaped panel including the contents 2222 upon the user selecting the 2114 is interpreted as selecting a panel type based on the identified content source], para 0125; a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user to access television content items via a TV portal, para 0115,0122)

Regarding claims 2, 11, 17, Yu further teaches comprising: retrieving, from a memory, a first image that is representative of the at least one of content source and second content information (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed interpreted as a first image representative of a content source] as shown in fig.21, para 0122; fig.6 shows a data processor 111 causes the provision module 117 to retrieve the contents from the assets stored within the service provider database 112 and makes the content accessible to the interface device 644 [interpreted as retrieving, from a memory, a content information for displaying in the content panel] via the network 120, para 0060); and displaying, via the television, the first image in the content panel (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed] as shown in fig.21, para 0122; a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user to access television content items via a TV portal, para 0115,0122).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055303

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of

Regarding claims 3, 12, 18, Yu further teaches wherein the content panel is an application panel (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed interpreted as application panel] as shown in fig.21, para 0122; fig. 18 displays a content listing area 1820 which lists the available contents with the time slots which includes the programming channels, which the users can highlights/select a particular content [application panel] using an input device which upon selection delivers the content, para 0119, 0123).

Regarding claim 4, Yu further teaches comprising: receiving a second directional input via the input device (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user access television content items via a TV portal, the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired TV content item [receiving a first directional input], further the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device [receiving a second directional input], upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 as shown in fig.21, para 0115, 0122); and determining, based on a second direction associated with the second directional input, a second content panel to display via the television (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device [receiving a second directional input], upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [second content panel to display] as shown in fig.21, para 0115, 0122).

Regarding claims 5, 14, 19, Yu further teaches comprising: receiving a second directional input via the input device (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user access television content items via a TV portal, the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired TV content item [receiving a first directional input], further the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device [receiving a second directional input], upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 as shown in fig.21, para 0115, 0122); determining, based on a second direction associated with the second directional input, a source of at least one content information to be displayed in the content panel based on the selected panel type (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device [receiving a second directional input], upon selection of the desired TV content 2022 which in this case is LOST TV program, the user is presented with a TV content overview page 2100 which provides information on the "Lost" TV program [interpreted as determining a source of a content information displayed], as shown in fig.21 , para 0115, 0122); retrieving at least a portion of the at least one content information from the determined source (fig.6 shows a data processor 111 causes the provision module 117 to retrieve the contents from the assets stored within the service provider database 112 and makes the content accessible to the interface device 644 [interpreted as retrieving, from a memory, a content information for displaying in the content panel] via the network 120, para 0060); and displaying, via the television, the content information associated with the determined source (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device [receiving a second directional input], upon selection of the desired TV content 2022 which in this case is LOST TV program, the user is presented with a TV content overview page 2100 which provides information on the "Lost" TV program [interpreted as determining a source of a content information displayed], as shown in fig.21 , para 0115, 0122).

Regarding claims 6, 13, 20, Yu further teaches wherein the third content information comprises information associated with content information marked as favorite (upon the user selecting the option of Bookmark 2124 [third content information] on fig.21 the user is enabled to add the content item to a list of favorite content items [content information marked as favorite] and further can also bookmark the content item for easy access, para 0125).

Regarding claim 7, Yu further teaches wherein the third content information comprises information associated with TV series episode content information (upon the user selecting the option of 2114 "Cast & Crew" on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 [third content information] related to the selected content item in this case is "Lost" television program, and further displays "show synopsis" option which provides details of the television program LOST [TV series episode content information], para 0125).

Regarding claim 8, Yu further teaches wherein the selected panel type is a search panel (figs.33, 34 & 35 shows on the display 3300 the user selects the search option 1715, and is presented with the search panel 3400, where the user types in the search terms 3422 and searches, para 0139, 0140).

Regarding claim 9, Yu further teaches wherein the selected panel type is a recommended panel (figs.33, 34 & 35 shows on the display 3300 the user selects the search option 1715, and is presented with the search panel 3400, where the user types in the search terms 3422 and searches, further based on the search query the user is provided with suggestions in the suggestions box 3424 [recommended panel], para 0139, 0140).

Regarding claim 15, Yu further teaches wherein the third content information comprises information associated with TV series episode content information (upon the user selecting the option of 2114 "Cast & Crew" on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 [third content information] related to the selected content item in this case is "Lost" television program, and further displays "show synopsis" option which provides details of the television program LOST [TV series episode content information], para 0125), and wherein the selected panel type is an info panel associated with the TV series episode content information (fig.18 shows the TV content listing with the option 1826 which the user activates by selecting, upon which the user is presented with the window 2100 on fig.21 which provides the user with the "show synopsis" option which provides details of the television program LOST [TV series episode content information], para 0123, 0125).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry

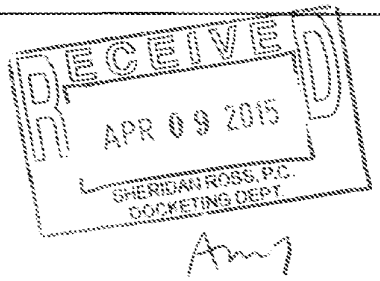
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



AU, Yiu, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
02 April 2015 (02.04.2015)	
Applicant's or agent's file reference	IMPORTANT NOTICE
6583-490-PCT	

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055383	16 August 2013 (16.08.2013)	18 September 2012 (18.09.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Philippe Bécamel

e-mail: pt03.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-490-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055383	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 18 September 2012 (18.09.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☒	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 24 March 2015 (24.03.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Yiu F. Au
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	13 NOV 2013
Applicant's or agent's file reference 6583-490-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55383	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/10 (2013.01)
USPC - 725/34

Applicant: Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to th IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	05 November 2013 (05.11.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55383

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

☒ the international application in the language in which it was filed.

☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account **the rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

a. (means)

☐ on paper

☐ in electronic form

b. (time)

☐ in the international application as filed

☐ together with the international application in electronic form

☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55383

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	7 and 9	YES
	Claims	1-6, 8 and 10-20	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-6, 8 and 10-20 lack novelty under PCT Article 33(2) as being anticipated by US 2012/0174039 A1 to Rhoads et al. (hereinafter 'Rhoads').

As per claim 1, Rhoads discloses a method of providing content for an intelligent television (TV) (content provided to HDTV (intelligent television) or 3D display TV, paragraph [0053]), comprising: loading an internal content provider module responsive to a user action or a scheduled event on the intelligent TV (provide program guides (scheduled events) on HDTV of a user, paragraphs [0053], [0075] and [0076]); communicating and receiving data relevant to the requested content from a corresponding subservice or a content provider module of the intelligent TV (receiving content according to user request, paragraph [0036] and [0076]); organizing the received data as the content according to a pre-defined format (organize programs on a TV screen according to a media format such as a VOD format, figures 1 and 2 and paragraphs [0027]-[0030]); and providing the content to video hardware or display of the intelligent TV or to a content provider module or application of the intelligent TV (providing and displaying media content to a TV, paragraphs [0046], [0063], [0074] and [0079]).

As per claim 12, Rhoads discloses a data service system in an intelligent Television (TV) (content provided by a server to HDTV (intelligent television) or 3D display TV, paragraphs [0053] and [0064]), comprising: an internal content provider module configured to provide content to video hardware or display of the in intelligent TV or to a content provider module or application of the intelligent TV (providing and displaying media content to a TV, paragraphs [0046], [0063], [0074] and [0079]); and a subservice configured to provide the internet content provider module with requested data for a pre-defined data model (a client-server internet connection with request from the user for a format like video on-demand content, paragraphs [0064] and [0067]), wherein the internal content provider module is loaded on the intelligent TV responsive to a user action or a schedule event on the intelligent TV (provide program guides (scheduled events) on HDTV of a user, paragraphs [0053], [0075] and [0076]), and wherein the internal content provider module organizes the received data from the subservice as the content according to a pre-defined format (organize programs on a TV screen according to a media format such as a VOD format, figures 1 and 2 and paragraphs [0027]-[0030]).

As per claim 19, Rhoads discloses an intelligent Television (TV) comprising a data service system (content provided by a server to HDTV (intelligent television) or 3D display TV, paragraphs [0053] and [0064]), the data service system comprising: an internal content provider module configured to provide content to video hardware or display of the in intelligent TV or to a content provider module or application of the intelligent TV (providing and displaying media content to a TV, paragraphs [0046], [0063], [0074] and [0079]); and a subservice configured to provide the internet content provider module with requested data for a pre-defined data model (a client-server internet connection with request from the user for a format like video on-demand content, paragraphs [0064] and [0067]), wherein the internal content provider module is loaded on the intelligent TV responsive to a user action or a schedule event on the intelligent TV (provide program guides (scheduled events) on HDTV of a user, paragraphs [0053], [0075] and [0076]), and wherein the internal content provider module organizes the received data from the subservice as the content according to a pre-defined format (organize programs on a TV screen according to a media format such as a VOD format, figures 1 and 2 and paragraphs [0027]-[0030]).

As per claim 2, Rhoads further discloses wherein the pre-defined format comprises one of a VOD data model, an EPG data model, and a media data model (a video-on-demand (VOD) system, paragraph [0025]).

As per claim 3, Rhoads further discloses wherein the subservice comprises one of a VOD subservice, an EPG subservice, and a media subservice (a video-on-demand (VOD) system, paragraph [0025]).

As per claims 4, 13 and 20, Rhoads further discloses wherein the internal content provider module comprises an EPG data provider, a media data provider, a media browser, a media scanner, or a thumbnail engine (media provider, figure 2 and paragraphs [0028], [0030] and [0074]).

As per claims 5 and 14, Rhoads further discloses wherein the EPG data provider is configured to serve one or more applications of the intelligent TV with EPG information in a read-only format (a program guide (format) that stored in read-only memory, paragraphs [0051], [0077] and [0078]).

As per claims 6 and 15, Rhoads further discloses wherein the media data provider is configured to provide media metadata personalized for a user (a metadata source for providing metadata to the user, paragraph [0139]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55383

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claims 13 and 20 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof:
Claims 13 and 20, line 3, the phrase "and or" should read "and/or".

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55383

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fu lly supported by the description, are made:

Claims 1, 12 and 19 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claims 1, 12 and 19 are indefinite for the following reason(s):
Claim 1, line 5, the phrase "the requested content" lacks antecedent basis.
Claim 12, line 9, the phrase "the received data" lacks antecedent basis.
Claim 19, line 10, the phrase "the received data" lacks antecedent basis.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55383

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of
-***-Continued from Box V: Citations and Explanations-***-

As per claims 8 and 16, Rhoads further discloses wherein the media browser is configured to provide a real-time view of media sources of the Intelligent TV (content displayed on a TV can be a live performance or live video, paragraphs [0025] and [0046]) and maintain a list of connected media sources of the Intelligent TV (media content listings displayed on a TV, paragraphs [0043] and [0046]).

As per claims 10 and 17, wherein the media scanner is configured to populate a media table using data retrieved by the media browser and rescan for new media periodically (a media navigator (scanner) from a list of media identifiers to transmit a query with the selected media identifier to retrieve additional media listings and/or media assets for presentation to the user and downloading media listings on a periodic basis, paragraphs [0055], [0056], [0064] and [0068]).

As per claims 11 and 18, Rhoads further discloses wherein the thumbnail engine is configured to provide thumbnails for media, applications, or other contents (small images displayed as a last row of the screen associated with media applications, figures 1 and 2 and paragraph [0028]).

Claim 7 lacks an inventive step under PCT Article 33(3) as being obvious over Rhoads in view of WO 2012/068438 A1 (Calvert).

As per claim 7, Rhoads does not teach wherein the media data provider is further configured to store the media metadata in a sqlite database. However, Calvert teaches wherein the media data provider is further configured to store the media metadata in a sqlite database (storing content metadata in a sqlite database, page 8, lines 30-31 and page 10, lines 10-14). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to improve Rhoads's system to include the media data provider is further configured to store the media metadata in a sqlite database, as taught by Calvert, to store the metadata in a specific database to protect an integrity of the metadata.

Claim 9 lacks an inventive step under PCT Article 33(3) as being obvious over Rhoads in view of US 2002/0152267 A1 (Lennon).

As per claim 9, Rhoads does not teach wherein the media browser maintains a non-permanent storage. However, Lennon teaches the media browser maintains a non-permanent storage (media browser 101 determines whether the specified description is available (maintain) in the description cache (temporary storage), paragraph [0181]).Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to improve Rhoads's system to include the media browser maintains a non-permanent storage, as taught by Lennon, to provide a temporary storage in order to manage types of stored content.

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

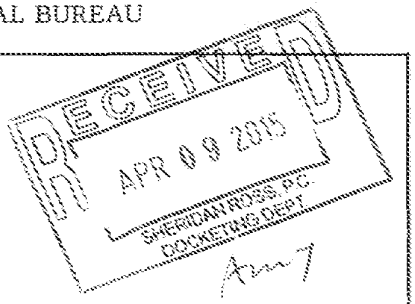
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



VICK, Jason, H.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
02 April 2015 (02.04.2015)	
Applicant's or agent's file reference	IMPORTANT NOTICE
6583-491-PCT	

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055344	16 August 2013 (16.08.2013)	18 September 2012 (18.09.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO	Authorized officer
34, chemin des Colombettes 1211 Geneva 20, Switzerland	Athina Nickitas-Etienne
Facsimile No. +41 22 338 82 70	e-mail: pt04.pct@wipo.int

Form PCT/IB/326 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-491-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055344	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 18 September 2012 (18.09.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 24 March 2015 (24.03.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Athina Nickitas-Etienne e-mail: pt04.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: JASON H. VICK
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	11 MAR 2014
Applicant's or agent's file reference 6583-491-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055344	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2014.01)
USPC - 348/564

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	16 February 2014	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055344

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055344

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	2-5, 9, 12-15, 19	YES
	Claims	1, 6-8, 10, 11, 16-18, and 20	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1, 6-8, 10, 11, 16-18, and 20 lack novelty under PCT Article 33(2) as being anticipated by Kim et al. (hereinafter Kim).

Regarding claim 1 Kim discloses a method of managing an application panel on an intelligent TV (abstract) comprising:
detecting a request to invoke the application panel (para. [0123], [0125], "Upon receipt of a return-to-home screen input, the controller 670 may control display of the home screen on the display 680…The home screen may further include an application menu including at least one application that can be executed.");
detecting one or more of displayed content on the intelligent TV and context information (para. [0123], "The home screen may include a plurality of card objects classified according to content sources.");
determining information to display in the application panel based on the one or more of displayed content on the intelligent TV and the context information (para. [0127], "When a card object is selected from among the card objects on the home screen, the controller 670 may control display of an image corresponding to the selected card object on the display 680.");
and displaying the application panel on a display of the intelligent TV including the determined information (para. [0132], "If an application view menu item is selected, the controller 670 may control display of applications or a list of applications that are present in the image display").

Regarding claim 11, Kim discloses a system to manage an application panel on an intelligent TV (abstract) comprising:
a processor adapted to detect a request to invoke the application panel (para. [0044], "application data processor 104);
a panel controller adapted to detect one or more of displayed content on the intelligent TV and context information (para. [0202]. "Through the application layer 1150, the user may navigate a desired menu by manipulating the remote controller while viewing a broadcast program.");
a silo application adapted to determine information to display in the application panel based on the one or more of displayed content on the intelligent TV and the context information (para. [0245], "The application list 1510 may include an icon representing each application and a brief description of the application.");
and a display controller adapted to display the application panel on a display of the intelligent TV including the determined information (para. [0132] If an application view menu item is selected, the controller 670 may control display of applications or a list of applications that are present in the image display device 600.").

Regarding claim 20. Kim discloses a system that manages an application panel on an intelligent TV (abstract) comprising:
means for detecting a request to invoke the application panel (para. [0123], [0125], "Upon receipt of a return-to-home screen input, the controller 670 may control display of the home screen on the display 680…The home screen may further include an application menu including at least one application that can be executed.");
means for detecting one or more of displayed content on the intelligent TV and context information (para. [0123], "The home screen may include a plurality of card objects classified according to content sources.");
means for determining information to display in the application panel based on the one or more of displayed content on the intelligent TV and the context information (para. [0127], "When a card object is selected from among the card objects on the home screen, the controller 670 may control display of an image corresponding to the selected card object on the display 680.");
and means for displaying the application panel on a display of the intelligent TV including the determined information (para. [0132], "If an application view menu item is selected, the controller 670 may control display of applications or a list of applications that are present in the image display").

Regarding claims 6, 16. Kim discloses further comprising determining and providing one or more sub-categories of information in the application panel (para. [0123], "The home screen may include a plurality of card objects classified according to content sources. The card objects may include at least one of a card object representing a thumbnail list of broadcast channels, a card object representing a broadcast program guide, a card object representing a program reservation list or a program recording list, or a card object representing a media list of a device connected to the image display device.").

Continued.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055344

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding claims 7, 17, Kim discloses further comprising determining and providing one or more sub-categories of selectable information in the application panel (para. [0125] "The home screen may further include an application menu including at least one application that can be executed. Accordingly, the game application according to the one embodiment may be designed in a format selectable through the application menu of the above-described home screen.").

Regarding claims 8 and 18, Kim discloses wherein the application panel includes executable portions (para. [0125], "The home screen may further include an application menu including at least one application that can be executed.").

Regarding claim 10. Kim discloses a non-transitory computer readable information storage media having stored thereon instructions, that when executed by one or more processors, cause to be performed the method steps in claim 1 (para. [0217], "The platforms of FIGS. 11 and 12 may be stored or loaded in the memory 640, the controller 670, or any other processor (not shown)...To execute applications, an additional application processor (not shown) may be further provided.").

Claims 9 and 19 lack an inventive step under PCT Article 33(3) as being obvious over Kim et al. (hereinafter Kim).

Regarding claims 9 and 19, Kim teaches wherein the application panel includes an information portion (para. [0128] "The controller 670 may control display of an input broadcast image and an object representing information about the broadcast image in a card object representing broadcast images"), a new portion, a recommended portion, a genre portion, an electronic program guide (para. [0203], "The application layer...may further include at least one of a TV guide application"), a category portion (para. 0268], "Fig. 21 to Fig. 23 respectively illustrate process steps for categorizing downloaded applications and displaying the categorized applications in the network TV..."), a favorites portion (para. [0302], "a Favorite Applications group") and a search portion (para. [0211] Using the applications of the application layer 1155, a variety of functions such as an ...application search service may be performed through network access.").
Kim does not explicitly teach wherein the application panel includes a new portion, a recommended portion, or a genre portion.
At the time of the invention, it would have obvious to one of ordinary skill in the art to include a new portion, a recommended portion, and a genre portion as they are examples of other categories already taught by Kim such as "applications related to Games, applications related to News, applications related to Sports, applications related to Health, applications related to Convenient Lifestyles, and so on," (para. [0292]). The motivation would have been to include selections for the user based on interest.

Claims 2-5 and 12-15 lack an inventive step under PCT Article 33(3) as being obvious over Kim et al. (hereinafter Kim) in view of Soloff.

Regarding claims 2 and 12, Kim teaches wherein an image hovers above a background and is partially transparent (Fig. 23, para. [0271], "in order to ensure the user's visibility, the network TV may be designed so that one of the image data 2311 and the unique number 2312 can be semi-transparent.").
Kim does not explicitly teach that the image is the application panel.
Soloff, also in the field of interactive television, teaches an application panel hovering above background content and is partially transparent (Fig. 7, para. [0045], "The maximum screen image 130, represents the screen with the transparent bar across the top, with icons and user instructions.").
At the time of the invention, it would have obvious to one of ordinary skill in the art to extent the image transparency taught by Kim to the entire application panel as taught by Soloff to provide an informative, instructive, manageable and interactive user interface (Soloff, para. [0010]).

Regarding claim 3. Kim does not explicitly teach continuing to display active background content.
Soloff teaches continuing to display active background content (paras. [0032]-[0038], "a textual description of what image the current camera is showing.").
At the time of the invention, it would have obvious to one of ordinary skill in the art to continue to display active background content as taught by Soloff in the invention taught by Kim in order to "allow the user to seamlessly navigate between" the various menu options (Soloff, para. [0045]).

Regarding claim 13. Kim does not explicitly teach wherein active background content is displayed.
Soloff teaches wherein active background content is displayed (paras. [0032]-[0038], "a textual description of what image the current camera is showing.").
At the time of the invention, it would have obvious to one of ordinary skill in the art to display active background content as taught by Soloff in the invention taught by Kim in order to "allow the user to seamlessly navigate between" the various menu options (Soloff, para. [0045]).

Regarding claims 4 and 14, Kim does not explicitly teach wherein the background content is Live TV, on demand content, media center content, applications or content from other inputs.
Soloff teaches wherein the background content is Live TV, on demand content, media center content, applications or content from other inputs (paras. [0033-0034], "broadcast").
At the time of the invention, it would have obvious to one of ordinary skill in the art to use Live TV, on demand content, media center content, applications or content from other inputs as the background content as taught by Soloff with the invention taught by Kim to provide an informative, instructive, manageable and interactive user interface (Soloff, para. [0010]).

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055344

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding claims 5 and 15, Kim does not explicitly teach wherein the application panel is dynamically updated based on the background content.
Soloff teaches wherein the application panel is dynamically updated based on the background content (paras. [0040]-[0042]. "One piece of information that will always be present in the menu is the Camera Placement screen 110, shown in FIG. 3, which allows the subscriber to know where the various cameras are situated within the venue.").
At the time of the invention, it would have obvious to one of ordinary skill in the art to dynamically update the application panel based on the background content as taught by Soloff in the invention taught by Kim to allow the user to access the information that was bundled along with the video information (Soloff, para. [0040]).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

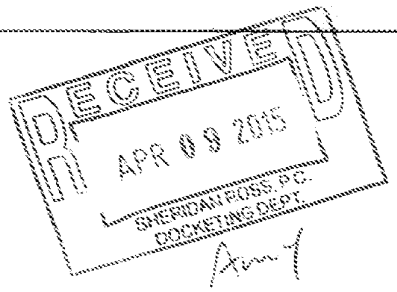
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



AU, Yiu, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
02 April 2015 (02.04.2015)	
Applicant's or agent's file reference	IMPORTANT NOTICE
6583-494-PCT	

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055389	16 August 2013 (16.08.2013)	18 September 2012 (18.09.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Kihwan Moon
Facsimile No. +41 22 338 82 70	e-mail: pt01.pct@wipo.int

Form PCT/IB/326 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-494-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055389	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 18 September 2012 (18.09.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☒	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 24 March 2015 (24.03.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Yiu F. Au
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	10 MAR 2014
Applicant's or agent's file reference 6583-494-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55389	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 21/2343 (2014.01)
USPC - 348/E5.002; 725/37

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to th IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	03 February 2014 (03.02.2014)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55389

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55389

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	4, 7, 10-11, 19-20	YES
	Claims	1-3, 5-6, 8-9, 12-18	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-3, 5-6, 8-9, and 12-18 lack novelty under PCT Article 33(2) as being anticipated by US 2012/0086857 A1 Kim et al. (hereinafter "Kim").

As to claim 1, Kim discloses a method of processing data from an external content provider for an intelligent television (TV), comprising: loading, on the intelligent TV, a source plugin configured for processing the data from the external content provider (the service control manager/delivery manager on the smart TV (source plugin loaded on the intelligent TV) takes control of received data from a content provider (from the external content provider), and feeds the data back to the server (configured for processing the data), paragraph [0066]); communicating and receiving, through the source plugin, the data from the external content provider (the service control manager/delivery manager (the source plug in) controls the received service data from a content provider (communicating and receiving the data from the external content provider), paragraphs [0065], [0066]); converting the received data from the external content provider into a data model format (the demodulation module performs demodulation and channel decoding of the received digital signal from a content provider (converting the received data from the external content provider) and outputs a video signal, an audio signal, and a data signal (into a data model format), paragraphs [0083], [0086]); processing the converted data by a subservice corresponding to the source plugin and the data model format (the video decoder receives video on demand data from the service control/delivery manager (a subservice corresponding to the source plugin and the data model format) decodes the multiplex video signal and performs scaling to output resolution (processing the converted data), paragraphs [0175], [0176]); and communicating with and providing the converted data to an internal content provider module configured to provide the converted data as content to the intelligent TV (the video decoders performs the scaling of the data resolution (communicating with and providing the converted data) through the display module (to an internal content provider module) to be displayed as an image on the smart TV (configured to provide the converted data as content to the intelligent TV), paragraphs [0110], [0176]).

As to claim 12, Kim discloses a data service system in an intelligent television (TV), comprising: a source plugin, the source plugin configured to communicate with and receive data from an external content provider (the service control manager/delivery manager (a source plug in) controls the received service data from a content provider (communicating and receiving the data from the external content provider), paragraphs [0065], [0066]); and processing the received data into a data model format (the demodulation module performs demodulation and channel decoding of the received digital signal (processing the received data) and outputs a video signal, an audio signal, and a data signal (into a data model format), paragraphs [0083], [0086]); and a subservice corresponding to the source plugin, the subservice configured to communicate with and provide the converted data to an internal content provider module configured to provide the converted data as content to the intelligent TV (the video decoder receives video on demand data from the service control/delivery manager (the subservice corresponding to the source plugin) decodes the multiplex video signal and performs scaling to output resolution through the display module (configured to communicate with and provide the converted data to an internal content provider module),to be displayed as an image on the smart TV (configured to provide the converted data as content to the intelligent TV), paragraphs [0110], [0175], [0176]).

As to claims 2, 13 and 15, Kim discloses the method of processing data of claim 1 and the data service system of claim 12. Kim further discloses a wherein the source plugin comprises one of a video-on-demand (VOD) source plugin, an electronic programming guide (EPG) source plugin, and a media source plugin (the service control/delivery manager provides video-on-demand (VOD) (wherein the source plugin comprises video-on-demand (VOD)), paragraph [0075]), wherein the data model format comprises one or a VOD data model, an EPG data model, and a media data model (the system receives data contents including VOD (wherein the data model format comprises VOD (paragraph [0097]), and wherein the subservice comprises one of a VOD subservice, an EPG subservice, and a media subservice (the video decoder decodes the multiplex video signal and performs scaling to output resolution (wherein the subservice) for VOD (comprises a VOD subservice), paragraphs [0097], [0175], [0176]).

As to claims 3 and 14, Kim discloses the method of processing data of claim 1 and the data service system of claim 12. Kim further discloses a method further comprising storing the received data or the converted data into a database by the source plugin or the subservice (the decoder (the subservice) makes a database for the service information and stores the database (storing the received data into a database), paragraph [0069]).

As to claims 5 and 16, Kim discloses the method of processing data of claim 1 and the data service system of claim 12. Kim further discloses a method of processing data wherein the source plugin is configured to work with an interface defined by the corresponding subservice (service/control delivery manager selects and controls (wherein the source plugin is configured to work) the VOD service using IGMP or RTSP interface (with an interface defined by the corresponding subservice), paragraph [0075]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55389

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claims 13 and 15 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof:

Claim 13, line 3, recites "comprises one or a"; however, this appears to be a typographical error. For purposes of this opinion, the limitation is interpreted to recite "comprises one of a".

Claim 15 comprises the same limitations and has the same dependency as claim 13.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55389

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fu lly supported by the description, are made:

Claim 4 is objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because Claim 4 is indefinite for the following reason:

Claim 4 recites the limitation "the database" in line 1. There is insufficient antecedent basis for this limitation in the claim. However, claim 3 recites "a database", and thus for purposes of this opinion, claim 4 is interpreted to depend upon the method of processing data of claim 3.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55389

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

-***-Continued from Box V: Citations and Explanations-***-

As to claims 6 and 17, Kim discloses the method of processing data of claim 1 and the data service system of claim 12. Kim further discloses a method wherein the source plugin is configured to communicate with a plurality of different external content provider modules (the service control manager (source plugin) selects and controls the service (configured to communicate) from content providers such as a cable system operator, a multiple system operator, a satellite broadcaster (with a plurality of different external content providers) and selects the appropriate protocol (modules), paragraphs [0034], [0072], [0074], [0075]).

As to claim 8, Kim discloses the method of processing data of claim 6. Kim further discloses a method wherein the source plugin is configured to communicate with a number of different external content provider modules (the service control manager (source plugin) selects and controls the service (configured to communicate) from content providers such as a cable system operator, a multiple system operator, a satellite broadcaster (with a number of different external content providers) and selects the appropriate protocol (modules), paragraphs [0034], [0072], [0074], [0075]).

As to claims 9, and 18, Kim discloses the method of processing data of claim 1 and the data service system of claim 12. Kim further discloses a method further comprising communicating with a resource arbitrator to gain access and provide content to hardware of the intelligent TV (the intelligent TV system includes a resource manager (communicating with a resource arbitrator) for efficient management of system resources, memory management, and interface for hardware, and schedule management (to gain access and provide content to hardware of the intelligent TV), paragraphs [0194], [0208]), wherein the hardware includes a local network, a cloud service, a display, and/or a video hardware (the intelligent TV system includes a network interface module that provides an interface for connecting the display device with a wireless LAN (wherein the hardware includes a local network), an interface to the Internet (a cloud service) a display device (a display), paragraphs [0041], [0094]).

Claim 4 lacks an inventive step under PCT Article 33(3) as being obvious over Kim in view of US 2012/0176546 A1 (Yoon).

As to claim 4, Kim discloses the method of processing data of claim 3. However, Kim fails to disclose a method wherein the database comprises a sqlite database. Yoon discloses a method wherein the database comprises a sqlite database (the library region (database) includes SQlite (comprises a sqlite database), paragraphs [0339], [0341]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Kim to include wherein the database comprises a sqlite database, as taught by Yoon, for the benefit of using an open source lightweight database.

Claim 7 lack an inventive step under PCT Article 33(3) as being obvious over Kim in view of WO 99/35849 A1 (Wugofski).

As to claim 7, Kim discloses the method of processing data of claim 6. However, Kim fails to disclose a method wherein the external content provider modules include providers for a particular service in one or more geographic zones. Wugofski discloses a method wherein the external content provider modules include providers for a particular service in one or more geographic zones (EPG content services module include content providers for EPG (Electronic Program Guide) (wherein the external content provider modules for a particular service); the channel region table identifies countries or local regions in which each channel is accessible (include providers in one or more geographic zones), page 8, lines 23-29). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Kim to include wherein the external content provider modules include providers for a particular service in one or more geographic zones, as taught by Wugofski, for the benefit of providing content from different geographic regions to the customer.

Claims 10-11 and 19-20 lack an inventive step under PCT Article 33(3) as being obvious over Kim in view of US 2011/0125755 A1 to Kaila et al. (hereinafter "Kaila"), and further in view of US 2006/0064716 A1 to Sull et al. (hereinafter "Sull").

As to claims 10 and 19, Kim discloses the method of processing data of claim 1 and the data service system of claim 12. Kim further discloses a method further comprising: thumbnail images associated with the received data (the thumbnail image may be generated from the demodulation stream signal output (thumbnail images associated with the received data), paragraph [0133]), a storage of the intelligent TV (the memory module (storage) of the display device (intelligent TV), paragraphs [0103], [0033]), configured to create and store the thumbnail images (channel browsing processor extracts image from the stream signal output to generate thumbnail image (configured to create the thumbnail images) and contents stored in the memory module (and store), paragraphs [0103], [0133]). However, Kim fails to disclose a method further comprising communicating with a thumbnail cache manager to manage thumbnail images, and storing the thumbnail images in a storage, wherein the thumbnail cache manager, and wherein the thumbnail images include movie thumbnails, posters, and TV channel logos. Kaila discloses a method further comprising communicating with a thumbnail cache manager to manage thumbnail images (users may sort and group images via a user interface(communicating with); thumbnail provider has a centralized cache to manage images (a thumbnail cache manager to manage thumbnail images), paragraphs [0015], [0026]) and storing the thumbnail images (thumbnails are stored in a storage device (storing the thumbnail images), paragraph [0059]), wherein the thumbnail cache manager (the thumbnail provider (the thumbnail cache manager), paragraphs [0015], [0026]). Sull discloses a method wherein the thumbnail images include movie thumbnails, posters, and TV channel logos (the thumbnail images generated (thumbnail images include) from video streams (movie thumbnails), a poster of the movie (posters), and TV channel logo), claims 1, 7, paragraph [0245]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Kim to include communicating with a thumbnail cache manager to manage thumbnail images, and storing the thumbnail images, wherein the thumbnail cache manager, as taught by Kaila, for the benefit of creating and storing thumbnail images for the viewer. Further, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Kim to include the thumbnail images include movie thumbnails, posters, and TV channel logos, as taught by Sull, for the benefit of creating appropriate thumbnails for the content.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55389

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claim 11, the combination of Kim, Kaila, and Sull discloses the method of processing data of claim 10. However, Kim fails to disclose the method further comprising periodically purging a portion of the thumbnail images from the storage. Kaila discloses a method further comprising periodically purging a portion of the thumbnail images from the storage (the system may implement a cache clearing process to clear thumbnails from the cache (periodically purging a portion of the thumbnail images from the storage), paragraph [0047]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Kim to include periodically purging a portion of the thumbnail images from the storage, as taught by Kaila, for the benefit of keeping the thumbnail storage up to date.

As to claim 20, Kim discloses an intelligent television (TV) comprising a data service system, the data service system comprising: a source plugin, the source plugin configured for communicating with and receiving data from an external content provider (the service control manager/delivery manager (a source plug in) controls the received service data from a content provider (communicating and receiving the data from the external content provider), paragraphs [0065], [0066]); and processing the received data into a data model format (the demodulation module performs demodulation and channel decoding of the received digital signal (processing the received data) and outputs a video signal, an audio signal, and a data signal (into a data model format), paragraphs [0083], [0086]); a subservice corresponding to the source plugin, the subservice configured to communicate with and provide the converted data to an internal content provider module configured to provide the converted data as content to the intelligent TV (the video decoder receives video on demand data from the service control/delivery manager (the subservice corresponding to the source plugin) decodes the multiplex video signal and performs scaling to output resolution through the display module (configured to communicate with and provide the converted data to an internal content provider module),to be displayed as an image on the smart TV (configured to provide the converted data as content to the intelligent TV), paragraphs [0110], [0175], [0176]); a database configured to store the received data or the converted data by the source plugin or the subservice (the decoder (the subservice) makes a database for the service information and stores the database (storing the received data into a database), paragraph [0069]); a resource arbitrator configured to provide access to the subservice to provide content to hardware of the intelligent TV (the intelligent TV system includes a resource manager (a resource arbitrator) for efficient management of system resources, memory management, and interface for hardware, the decoder, and schedule management (to provide access to the sub service and provide content to hardware of the intelligent TV), paragraphs [0194], [0208]), wherein the hardware includes a local network, a cloud service, a display, and/or a video hardware (the intelligent TV system includes a network interface module that provides an interface for connecting the display device with a wireless LAN (wherein the hardware includes a local network), an interface to the Internet (a cloud service) a display device (a display), paragraphs [0041], [0094]); thumbnail images associated with the received data (the thumbnail image may be generated from the demodulation stream signal output (thumbnail images associated with the received data), paragraph [0133]), a storage of the intelligent TV (the memory module (storage) of the display device (intelligent TV), paragraphs [0103], [0033]), configured to create and store the thumbnail images (channel browsing processor extracts image from the stream signal output to generate thumbnail image (configured to create the thumbnail images) and contents stored in the memory module (and store), paragraphs [0103], [0133]). However, Kim fails to disclose an intelligent television comprising: and a thumbnail cache manager configured to manage thumbnail images and to store the thumbnail images, wherein the thumbnail images include movie thumbnails, posters, and TV channel logos. Kaila discloses a method further a thumbnail cache manager to manage thumbnail images (thumbnail provider has a centralized cache to manage images (a thumbnail cache manager to manage thumbnail images), paragraphs [0015], [0026]) and to store the thumbnail images (thumbnails are stored in a storage device (to store the thumbnail images), paragraph [0059]). Sull discloses a method wherein the thumbnail images include movie thumbnails, posters, and TV channel logos (the thumbnail images generated (thumbnail images include) from video streams (movie thumbnails), a poster of the movie (posters), and TV channel logo), claims 1, 7, paragraph [0245]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Kim to include a thumbnail cache manager to manage thumbnail images, and to store the thumbnail images, as taught by Kaila, for the benefit of managing and storing thumbnail images for the viewer. Further, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of Kim to include the thumbnail images include movie thumbnails, posters, and TV channel logos, as taught by Sull, for the benefit of creating appropriate thumbnails for the content.

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

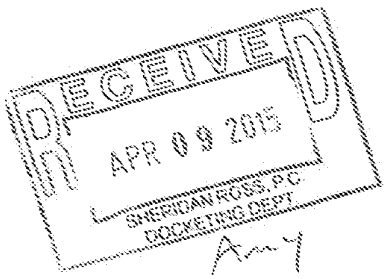
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



REINHARDT, Dean, N.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
02 April 2015 (02.04.2015)	
Applicant's or agent's file reference	IMPORTANT NOTICE
6583-495-PCT	

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055283	16 August 2013 (16.08.2013)	18 September 2012 (18.09.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Philippe Bécamel
Facsimile No. +41 22 338 82 70	e-mail: pt03.pct@wipo.int

Form PCT/IB/326 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-495-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055283	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 18 September 2012 (18.09.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 24 March 2015 (24.03.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: DEAN N. REINHARDT
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	04 MAR 2014
Applicant's or agent's file reference 6583-495-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055283	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06Q 30/00 (2014.01)
USPC - 715/810

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	19 February 2014	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055283

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055283

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	9-10, 19-20	YES
	Claims	1-8, 11-18	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-8, 11-18 lack novelty under PCT Article 33(2) as being anticipated by Jordan et al., hereinafter referred to as Jordan.

Regarding claim 1, Jordan discloses a non-transitory computer readable storage medium having stored thereon instructions that cause a processor to execute (fig. 25, para 127) a method for accessing media on a television (method for content browsing on television, abstract, Fig. 1, para 42; see Fig. 15), the method comprising the steps of: searching a network connected to the television to identify a plurality of media sources (step 1510, Fig. 15; para 97-98); determining a number of media items associated with the plurality of media sources (processing content information, step 1512, Fig. 15; para 97-98); identifying metadata associated with the determined number of media items (content information and metadata associated with the content, para 100, 33); storing the metadata in a memory (storing metadata, para 33); receiving a request from a user to display one or more of the media items (user requests search and selects content item, step 1514, Fig. 15, para 97-98); and displaying on the television display the one or more media items based on the stored metadata (selected item presented to user, step 1516, Fig. 15, para 98; para 33).

Regarding claim 11, Jordan discloses a television system (Fig. 1, para 42), comprising: a display (2510, Fig. 25); a memory (main memory 2504, Fig. 25); a processor in communication with the memory and the display (processor 2502, Fig. 25), the processor operable to: search a network connected to the television to identify a plurality of media sources (step 1510, Fig. 15; para 97-98); determine a number of media items associated with the plurality of media sources (processing content information, step 1512, Fig. 15; para 97-98); identify metadata associated with the determined number of media items (content information and metadata associated with the content, para 100, 33); store the metadata in the memory (storing metadata, para 33); receive a request from a user to display one or more of the media items (user requests search and selects content item, step 1514, Fig. 15, para 97-98); and display on the display the one or more media items based on the stored metadata (selected item presented to user, step 1516, Fig. 15, para 98; para 33).

Regarding claim 17, Jordan discloses a method for accessing media on a television (method for content browsing on television, abstract, Fig. 1, para 42; see Fig. 15), the method comprising: searching a network connected to the television to identify a plurality of media sources (step 1510, Fig. 15; para 97-98); the plurality of media sources comprising at least one of: a video server, an audio server, a digital video recorder, a set-top box, a social media site, a voice mail server, a source marked by the user, a content provider (see Fig. 1-2, content source from service provider, para 39-40), a compact disk player, a digital video device player, a cellular telephone, a personal digital assistant, a notebook, an audio player, a document server, a personal computer, a really simple syndication feed, a social media site, a universal serial bus device, an internet site (Netflix, para 42), and a tablet device; determining a number of media items associated with the plurality of media sources (processing content information, step 1512, Fig. 15; para 97-98); identifying metadata associated with the determined number of media items (content information and metadata associated with the content, para 100, 33); storing the metadata in a memory (storing metadata, para 33); receiving a request from a user to display one or more of the media items (user requests search and selects content item, step 1514, Fig. 15, para 97-98); and displaying on the television display the one or more media items based on the stored metadata (selected item presented to user, step 1516, Fig. 15, para 98; para 33).

Regarding claims 2, 12, 18, Jordan discloses receiving a search request from the user for an individual media item (user search request, step 1514, Fig. 15); identifying multiple media sources in the plurality of media sources that have the individual media item (content gathered from multiple media sources, para 97-98, 33, Fig. 15); presenting a list of offers from the multiple media sources to the user for the individual item (content item displayed to user, Fig. 15-16, para 97-98; content items offered to consumer, para 71); receiving a selection by the user of an individual offer from the list of offers (para 71, 97-98); and providing access to the individual item (access content items offered, para 71).

Regarding claims 3, 13, Jordan discloses wherein the list of offers comprises at least one of: an offer to play the individual media item, an offer to view the individual media item, a pay per view offer to view the individual media item, an offer to rent the individual media item, an offer to purchase a ticket to a movie theater showing the individual media item, an offer to purchase the individual media item, a trial access offer to the individual media item, an offer to check out the individual media item, and an offer to access the individual media item on a social media site (enable a consumer to browse, access, purchase, and download particular content items offered by the particular content source 130, para 71, Fig. 8).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055283

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

Regarding claims 4, 14, Jordan discloses wherein the plurality of media sources comprises at least two of: a video server, an audio server, a digital video recorder, a set-top box, a social media site, a voice mail server, a source marked by the user, a content provider (see Fig. 1-2, content source from service provider, para 39-40), a compact disk player, a digital video device player, a cellular telephone, a personal digital assistant, a notebook, an audio player, a document server, a personal computer, a really simple syndication feed, a social media site, a universal serial bus device, an internet site (Netflix, para 42), and a tablet device.

Regarding claims 5-6, 15-16, Jordan discloses wherein at least one of the media sources is a device that can be temporarily connected to the network, and wherein one of the at least one temporarily connected devices is not connected to the network (devices such as network attached storage device, or computer, para 42, Fig. 1-2).

Regarding claim 7, Jordan discloses wherein the one or more media items displayed includes at least one recommended media item based on the stored metadata (recommendation of content items, para 60, 65-66).

Regarding claim 8, Jordan discloses after receiving the request, identifying the user associated with the request, wherein the one or more media items displayed are based on stored metadata related to the identified user (content items recommended based on user behavior and user profile information, para 66-68).

Claims 9, 19 lack an inventive step under PCT Article 33(3) as being obvious over Jordan in view of Jeong.

Regarding claims 9, 19, Jordan discloses the invention above, but fails to disclose wherein identifying metadata comprises: performing a first scan of the determined number of media items; retrieving basic metadata associated with the determined number of media items; identifying media items that need a second scan; and performing the second scan after the first scan is completed. Jeong is in the field of Television signal processing and smart tv's in general and presents methods for accessing multimedia documents ([0054)] performing a first scan of the determined number of media items ([0111] The external device interface module 135 is connected to external devices such as Digital Versatile Disks (DVD), Blu-rays, game devices, cameras, camcorders, computers (e.g., notebook computers), etc. through wire/wireless cables.); retrieving basic metadata associated with the determined number of media items ([0097] The metadata manager 712 manages metadata related to the service and stores the metadata in the SI and Metadata DB 711); identifying media items that need a second scan; and performing the second scan after the first scan is completed ([0190] Fig. 9 shows a communication procedure performed between a display device and one or more other devices. As illustrated in Fig. 9, display device 100 can perform communication with a broadcasting station 210, a network server 220, or an external device 230). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Jeong and incorporate the above features in the invention of Jordan in order to provide a system for providing multitude of ways in which multimedia content can be accessed (Jeong, [0110] The external device interface module 135 may connect an external device to the display device 100. To this end, external device interface module 135 may include an A/V input/output unit (not shown) or a wireless communication unit).

Claims 10, 20 lack an inventive step under PCT Article 33(3) as being obvious over Jordan in view of Wilf et al., hereinafter referred to as Wilf, and further in view of Jeong.

Regarding claims 10, 20, Jordan discloses the invention above, but fails to disclose wherein storing the metadata in memory comprises: assigning a unique media source identifier to each of the plurality of media sources; assigning a unique media item identifier to each of the determined number of media items; creating a personal metadata table to record media items viewed and media items tagged as a favorite; creating a media source table to record metadata for all connected and disconnected media sources; and creating a media data table to record all other identified metadata. Wilf is in the field of accessing media on a television (Fig. 11 – Television Signal)and teaches assigning a unique media source identifier to each of the plurality of media sources (Pg. 18 Lines 8 to 11, As mentioned above, the method for computing attribute-specific indexing data and for querying these attributes can be implemented by methods known in the art.); assigning a unique media item identifier to each of the determined number of media items (Pg. 17 Lines 21 to 29, The search menu consists of a set of content-based attributes such as visual attributes 710. audio attributes 720, topic-related attributes 730, and special attributes 740 such as breaking news or explosions.); creating a personal metadata table to record media items viewed and media items tagged as a favorite (Pg. 20 Lines 3 to 27; Pg. 21 Lines 9 to 17); and creating a media data table to record all other identified metadata (Pg. 21 Lines 9 to 17, Interactive television systems establish a database of viewer preferences based on particular characteristics previously delivered to the viewer.). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the metadata identifier features as taught in Wilf with the invention of Jordan in order to tag favorite content items.
Jeong is in the field of Television signal processing and smart tv's in general and presents methods for accessing multimedia documents ([0054)] wherein storing the metadata in memory comprises (Fig. 5, Block 711 – SI & Metadata DB & Block 712 – Metadata Manager; [0097]: The metadata manager 712 manages metadata related to the service and stores the metadata in the SI and Metadata DB 711. The SI and Metadata DB 711 stores the service information decoded by the PSI and (PSIP and/or SI) decoder 704, the metadata managed by the metadata manager 712, and the information required to select the service provider provided by the service discovery manager 710.) ; creating a media source table to record metadata for all connected and disconnected media sources ([0097] The metadata manager 712 manages metadata related to the service and stores the metadata in the SI and Metadata DB 711. The SI and Metadata DB 711 stores the service information decoded by the PSI and (PSIP and/or SI) decoder 704, the metadata managed by the metadata manager 712, and the information required to select the service provider provided by the service discovery manager 710.);
It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Jeong and incorporate the above features in the invention of Jordan in order to add additional aspects of storing of metadata and providing enhanced services (Jeong, Fig. 5, Block 711 – SI & Metadata DB & Block 712 – Metadata Manager; [0097]).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

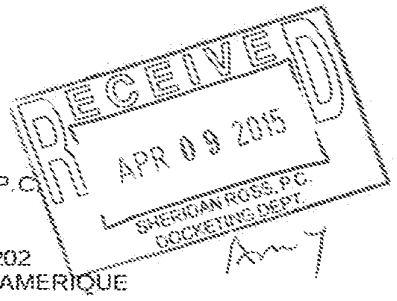
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



AU, Yiu, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
02 April 2015 (02.04.2015)	
Applicant's or agent's file reference	IMPORTANT NOTICE
6583-496-PCT	

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055564	19 August 2013 (19.08.2013)	18 September 2012 (18.09.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Simin Baharlou

e-mail: pt09.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-496-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055564	International filing date *(day/month/year)* 19 August 2013 (19.08.2013)	Priority date *(day/month/year)* 18 September 2012 (18.09.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 24 March 2015 (24.03.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Simin Baharlou
Facsimile No. +41 22 338 82 70	e-mail: pt09.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Yiu F. Au
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	22 NOV 2013
Applicant's or agent's file reference 6583-496-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55564	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/00 (2013.01)
USPC - 725/141

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to th IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	14 November 2013 (14.11.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55564

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

☒ the international application in the language in which it was filed

☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

a. (means)

☐ on paper

☐ in electronic form

b. (time)

☐ in the international application as filed

☐ together with the international application in electronic form

☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55564

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	NONE	YES
	Claims	1-20	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by US 2012/0174039 A1 to Rhoads et al. (hereinafter 'Rhoads').

As per claim 1, Rhoads discloses a method of managing Electronic Programming Guide (EPG) information for an intelligent television (TV) (a control circuitry for controlling (managing) a television program guide for a HDTV (intelligent TV), paragraphs [0025], [0043], [0053], [0075] and [0077]), comprising: polling and retrieving a plurality of EPG sources for updated EPG information (navigating (polling) and retrieving updated program guide information, paragraphs [0127], [0128], [0131], [0145] and [0148]); aggregating the EPG information from the plurality of EPG sources (combining (aggregating) media guidance data for content from different types of content sources, paragraph [0031]); and providing a relevant portion of the EPG information to an application of the intelligent TV (providing options within the region 126 is related (relevant) to features in program listings (applications) of the grid 102 in the HDTV, paragraphs [0035], [0043] and [0053]).

As per claim 9, Rhoads discloses an EPG data service for an intelligent TV (a control circuitry for controlling a television program guide for a HDTV (intelligent TV), paragraphs [0025], [0043], [0053], [0075] and [0077]), comprising: a plurality of source plugins configured to poll and retrieve updated EPG information from a plurality of respective EPG information sources (media sources for navigating (polling) and retrieving updated program guide information, paragraphs [0056], [0127], [0128], [0131], [0145] and [0148]); and an EPG subservice configured to receive the EPG information retrieved by the plurality of source plugins (media sources retrieve plurality of program guide information, paragraphs [0056], [0064], [0088] and [0108]), aggregate the EPG information (combining (aggregating) media guidance data for content from different types of content sources, paragraph [0031]), and provide a relevant portion of the EPG information to an application of the intelligent TV (providing options within the region 126 is related (relevant) to features in program listings (applications) of the grid 102 in the HDTV, paragraphs [0035], [0043] and [0053]).

As per claim 17, Rhoads discloses an intelligent TV (a HDTV (intelligent TV), paragraphs [0043] and [0053]) comprising: an EPG display application configured to generate an EPG display for the intelligent TV (a TV program guide displayed on a HDTV screen, figure 1 and paragraphs [0028]-[0035] and [0092]); and an EPG data service (television program guide that receives program guide data, paragraph [0075]), the EPG data service comprises a plurality of source plugins configured to poll and retrieve updated EPG information from a plurality of respective EPG information sources (media sources for navigating (polling) and retrieving updated program guide information, paragraphs [0056], [0127], [0128], [0131], [0145] and [0148]) and an EPG subservice configured to receive the EPG information retrieved by the plurality of source plugins (media sources retrieve plurality of program guide information, paragraphs [0056], [0064], [0088] and [0108]), aggregate the EPG information (combining (aggregating) media guidance data for content from different types of content sources, paragraph [0031]), and provide a relevant portion of the EPG information to the EPG display application (providing options within the region 126 is related (relevant) to features in program listings (applications) of the grid 102 in the HDTV, paragraphs [0035], [0043] and [0053])

As per claims 2 and 10, Rhoads further discloses wherein for an EPG source with substantially no updated EPG information (a regular daily broadcast TV programs like ABC or HOB programs that needed no to be updated, paragraph [0074]), the polling and retrieving step/ the respective source plugin comprises associating the EPG information from the EPG source with dummy EPG data (a content source 416 is the originator of content (dummy EPG data) such as a television broadcaster, a Webcast provider or is not originator of content such as an on demand content provider, an Internet provider of content of broadcast programs for downloading, wherein the content source 416 may include cable sources, satellite providers, on-demand providers, Internet providers, over-the-top content providers, or other providers of content, paragraph [0074])

As per claim 3, Rhoads further discloses wherein the polling and retrieving step is activated by the intelligent TV at a default or user-defined interval (the navigating and retrieving HDTV programs is selected (activated) by a user-defined action, paragraphs [0028], [0043] and [0053]).

As per claim 4, Rhoads further discloses wherein the polling and retrieving step is activated after a channel scanning operation by the intelligent TV (a navigating and retrieving of TV program happened after the HDTV display the favorite channels (scanning operation by the intelligent TV), paragraphs [0043] and [0053]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55564

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As per claim 5, Rhoads further discloses wherein the polling and retrieving step comprises sending to an Internet or cloud EPG source a channel name list of the Intelligent TV (a list of channels of the HDTV is provided on cloud source or on an internet, paragraphs [0035], [0043], [0053], [0078], [0083]-[0086], [0090] and [0092]) and retrieving EPG information from the Internet or cloud EPG source that matches channels in the channel name list (acquiring the channels from list or menu that that match user-defined list of channels, paragraphs [0035], [0043], [0053], [0078], [0083]-[0086], [0090] and [0092], [0117] and [0118]).

As per claim 6, Rhoads further discloses wherein the polling and retrieving step further comprises retrieving EPG information for only selected programs and/or channels from the EPG sources (displaying descriptive information of the selected channels programs, paragraphs [0051], [0056], [0086], [0096], [0101] and [0110]).

As per claims 7 and 15, Rhoads further discloses wherein the aggregating step/the EPG subservice comprises aggregating the updated EPG information from the plurality of EPG sources (combining (aggregating) new or updated media guidance data for content from different types of content sources, paragraphs [0031], [0127] and [0128]) and resolving conflicts between duplicate EPG information from the plurality of EPG sources according to a plurality of rules (a condition (rule) is set when a user desires to traverse a same path that led the user to a media asset, paragraphs [0025], [0063] and [0137]).

As per claims 8 and 16, Rhoads further discloses wherein the resolving conflicts step/ the EPG subservice comprises using EPG information from a first EPG source as a primary source (a media source that displays a main TV program menu, paragraph [0035]) and overwriting conflicting EPG information from the primary source with a second EPG source that is considered more reliable (replacing or updating a TV program menu from one media source with another TV program menu from different media source, paragraphs [0053], [0056], [0127], [0126], [0131], [0145] and [0148]).

As per claims 11 and 18, Rhoads further discloses wherein one or more of the plurality of source plugins is configured to poll and retrieve the updated EPG information at a default or user-defined interval (TV programs are retrieved from media sources using TV programs selected (activated) by a user-defined action, paragraphs [0028], [0043], [0053], [0056], [0127], [0128], [0131], [0145] and [0148]).

As per claim 12, Rhoads further discloses one or more of the plurality of source plugins is configured to poll and retrieve the updated EPG information after a channel scanning operation by the Intelligent TV (using the media source, a navigating and retrieving of TV program happened after the HDTV display the favorite channels (scanning operation by the Intelligent TV), paragraphs [0043], [0053], [0056], [0127], [0128], [0131], [0145] and [0148]).

As per claims 13 and 19, Rhoads further discloses wherein an Internet or cloud source plugin of the plurality of source plugins is configured to send to an Internet or cloud EPG source a channel name list of the Intelligent TV (using media source, a list of channels of the HDTV is provided on cloud source or on an internet, paragraphs [0035], [0043], [0053], [0056], [0078], [0083]-[0086], [0090], [0092], [0127], [0128], [0131], [0145] and [0148]).

As per claim 14, Rhoads further discloses wherein one or more of the plurality of source plugins are configured to poll and retrieve the updated EPG information for only selected programs and/or channels from the EPG sources (using media source, displaying descriptive information of the selected channels programs, paragraphs [0051], [0053], [0056], [0086], [0096], [0101] and [0110], [0127], [0128], [0131], [0145] and [0148]).

As per claim 20, Rhoads further discloses a tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed by the microprocessor, perform the steps of claim 1 (microprocessor for executing instructions stored in a memory, paragraphs [0049] and [0077]).

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

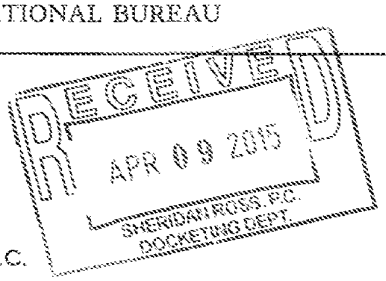
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



AU, Yiu, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
02 April 2015 (02.04.2015)	
Applicant's or agent's file reference	IMPORTANT NOTICE
6583-497-PCT	

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055379	16 August 2013 (16.08.2013)	18 September 2012 (18.09.2012)

Applicant

FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer

Philippe Bécamel

e-mail: pt03.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-497-PCT	**FOR FURTHER ACTION** See item 4 below	
International application No. PCT/US2013/055379	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 18 September 2012 (18.09.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 24 March 2015 (24.03.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Philippe Bécamel e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Yiu F. Au
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	06 DEC 2013
Applicant's or agent's file reference 6583-497-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55379	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04W 80/04 (2013.01)
USPC - 370/331

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [x] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to th IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	7 November 2013 (07.11.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55379

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

☒ the international application in the language in which it was filed.

☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a)).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

a. (means)

☐ on paper

☐ in electronic form

b. (time)

☐ in the international application as filed

☐ together with the international application in electronic form

☐ subsequently to this Authority for the purposes of search

4 ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5 Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55379

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	2-4, 9-12, 14, 19 and 20	YES
	Claims	1, 5-8, 13 and 15-18	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1, 5-8, 13 and 15-18 lack novelty under PCT Article 33(2) as being anticipated by US 2009/0129340 A1 (Handa).

As per Claims 1, 8 and 13, Handa discloses a method, an intelligent television (TV) and DLNA subservice module, comprising: a Digital Living Network Alliance (DLNA) subservice module (the service determination unit 301a (DLNA subservice module) of the controller sends a confirm message to the digital television and the storage server in reply to live status confirmation, paragraph [0209]) configured to retrieve status data from a plurality of DLNA devices connected through a network (the system includes controllers 12 and 32 that may be integrally constituted by an apparatus that provides a data receiving service, such as the digital television 11 (intelligent TV) that has a digital media player and digital media server (DLNA devices) that is connected to a home network having a network interface via a controlling protocol DLNA and by a service determination unit 301a that determines the status of the connected DLNA devices (status data), with respect to the digital television and the storage devices, paragraphs [0008], [0036], [0037], [0047], [0050], [0065], [0209]); updating an internal status data for the external devices in the intelligent TV using the retrieved status (the storage server (external device) is connected to a home network to which the digital television 11 provides the service data retrieved from the DLNA control protocol and the service determination unit 301a (DLNA subservice module) of the controller that determines the status of the network connection (status data) and sends a confirm message to the digital television and the storage server in reply to live status confirmation, paragraphs [0038], [0065], [0209]); and notifying an internal content provider module of the intelligent TV with the updated internal status data (the controller 12, which may be integrally constituted with the digital television (intelligent TV), has a SIP control unit (internal content provider) that sends a signal for ending confirmation data request in response to information from the service determination unit 301a (notification) that a DLNA device is unavailable (internal status data), paragraphs [0054], [0055], [0080], [0099], [0140], [0214]).

As per Claims 5 and 16, Handa discloses the method and DLNA subservice of claims 1 and 13, wherein the external device is a Digital Living Network Alliance (DLNA) device,and communicates with the Intelligent TV using the Universal Plug and Play (UPnP) protocol (the storage server (external device) communicates with the controller that may be integrally constituted by an apparatus that provides a data receiving service, such as the digital television 11 (Intelligent TV) via DLNA in which UPnP is used to recognize each device connected to home network 1, paragraphs [0037], [0047], [0078], [0079]).

As per Claims 6 and 17, Handa discloses the method and DLNA subservice of claims 1 and 13, wherein the retrieved status data is sent by the external device on one or more of a connection of the external device to the network, a disconnection of the external device from the network, and a change of status to the external device (a SIP control unit in the controller adds information data request (update internal status data) that it receives from the DLNA control protocol via SIP session control protocol that is used to communicate between the storage devices on the storage server (external device) and the digital television; it further sends signal to connect the storage server (external device) with the home network and sends a disconnect signal to end the service request to the storage server (external device), paragraphs [0054], [0055], [0099], [0140], [0219], [0220]).

As per Claims 7 and 18, Handa discloses the method and DLNA subservice of claims 1 and 13, wherein the status data comprises one or more of device discovery data, device disconnection data, and media data (service determination unit 301a determines whether DLNA devices connected to the network are available or disconnected (device discovery and disconnection data), paragraphs [0038], [0065], [0209]-[0213]).

As per Claim 15, Handa discloses the DLNA subservice of claim 13, wherein the internal content provider module comprises one or more of a media scanner and a media browser (SIP control unit (internal content provider module) communicates with respect to the availability of DLNA devices on the home networks (media scanner), paragraphs [0008], [0039], [0052], [0054], [0080], [0214]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55379

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
Claims 14 - 20 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: Claims 14 - 20 have a typo error ("DNLA"). It should be DLNA.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55379

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:
-***-Continued from Previous Supplemental Box-***-

Claims 2-4 and 14 lack an inventive step under PCT Article 33(3) as being obvious over Handa in view of US 2012/0151006 A1 to McInerney et al. (hereinafter 'McInerney').

As per Claims 2 and 14, Handa discloses the method and DLNA subservice module of managing external devices of claims 1 and 13. Handa fails to disclose further comprising aggregating the updated internal status data with status data for other devices connected through the network as a unified data. McInerney discloses further comprising aggregating the updated internal status data with status data for other devices connected through the network as a unified data (the method providing a status list (aggregating) may have update data (unified data) of DLNA rendering devices (external devices) that reflects changes to the list (internal status data) that may originate from the mobile content relay device which can be a digital media player or from another device in the local network (such as a DLNA server or controller) based on the local network status of the DLNA renderer devices (external devices), paragraphs [0016], [0044], [0050]). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Handa's method and DLNA subservice module to manage external devices include wherein aggregating the updated internal status data with status data for other devices connected through the network as a unified data, as taught by McInerney, for the advantage of centralizing status data for all connected devices, allowing more efficient management of external devices.

As per Claim 3, the combination of Handa and McInerney discloses the method of managing external devices of claim 2. However, Handa fails to disclose wherein the aggregating the updated internal status data with status data for other devices connected through the network is performed by an internal content provider module of the intelligent TV. McInerney further discloses wherein the aggregating the updated internal status data with status data for other devices connected through the network is performed by an internal content provider module of the intelligent TV (a method providing the status list (aggregating) that may have update data of DLNA rendering devices (external devices) that reflects changes to the list (internal status data) that may originate from the mobile content relay device which can be a digital media player (intelligent TV) based on the local network status of the DLNA renderer devices (external devices) and the mobile content relay device which includes a presence status monitor (internal content provider module) can communicate the received content list with the DLNA server, paragraphs [0016], [0031], [0044], [0050], [0055]). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Handa's method to manage external devices include wherein the aggregating the updated internal status data with status data for other devices connected through the network is performed by an internal content provider module of the intelligent TV, as taught by McInerney, for the advantage of centralizing status data for all connected devices, allowing more efficient management of external devices.

As per Claim 4, Handa discloses the method of claim 3, wherein the internal content provider module comprises one or more of a media scanner and a media browser (SIP control unit (internal content provider module) communicates with respect to the availability of DLNA devices on the home networks (media scanner), paragraphs [0008], [0039], [0052], [0054], [0080], [0214]).

Claims 9-12, 19 and 20 lack an inventive step under PCT Article 33(3) as being obvious over Handa in view of US 2010/0306402 A1 to Russell et al. (hereinafter 'Russell').

As per Claims 9 and 19, Handa disclose the intelligent TV and DLNA subservice module of claims 8 and 15. Handa further fails to disclose wherein the internal content provider module comprises a media browser configured to provide a real-time view of media sources of the intelligent TV. Russell discloses wherein the internal content provider module comprises a media browser configured to provide a real-time view of media sources of the intelligent TV (the method and apparatus include content providers (internal content provider module) that are used to download media data on the client devices such as set-top box connected to TV (intelligent TV) in the home network that support DLNA, downloads content from media providers and makes the content available to PlayStation via DLNA in which the media can be searched using Content browser (media browser) and the game client (media sources) that may be integrated within a TV to provide video in real time via the Internet, paragraphs [0039], [0040], [0043], [0073], [0133], [0136]). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Handa's system that includes an intelligent TV wherein the internal content provider module comprises a media browser configured to provide a real-time view of media sources of the intelligent TV as taught by Russell, for the advantage of displaying to the user in a friendly fashion the available media sources.

As per Claim 10, the combination of Handa and Russell discloses the intelligent TV of claim 9. Handa fails to disclose wherein the media browser comprises a plug-in configured to retrieve metadata from the plurality of DLNA devices that are DLNA content servers. Russell further discloses wherein the media browser comprises a plug-in configured to retrieve metadata from the plurality of DLNA devices that are DLNA content servers (the method and apparatus include content providers that are used to download media data on the client devices such as set-top box connected to TV (intelligent TV) or home computer (DLNA devices) in the home network that support DLNA, downloads content from media providers and makes the content available to PlayStation via DLNA in which the media can be searched using Content browser (media browser) that includes information described in the Content source information (plug-in) that can access other servers (DLNA content servers) with information regarding media, such as Media Metadata database, paragraphs [0043], [0073]). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Handa's system that includes the intelligent TV wherein the media browser comprises a plug-in configured to retrieve metadata from the plurality of DLNA devices that are DLNA content servers as taught by Russell, for the advantage of providing easier access to connected DLNA media sources.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55379

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:
-***-Continued from Previous Supplemental Box-***-

As per Claims 11 and 20, the combination of Handa and Russell discloses the intelligent TV and DLNA subservice module of claims 9 and 19. Handa fails to disclose further comprising a media scanner configured to populate a media table using data retrieved by the media browser. Russell discloses further comprising a media scanner configured to populate a media table using data retrieved by the media browser (the media data on the client devices such as set-top box connected to TV (intelligent TV) or home computer (DLNA devices) downloads content from media providers and makes the content available to PlayStation via DLNA in which the media can be searched using Content browser (media browser) which includes content source information accessed through Content Manager 610 (media scanner) that determines how to retrieve content for the user that can be obtained from internal media library 606 (media table), or from the Internet via Content Loader (DLNA subservice module), paragraphs [0043], [0070], [0073]). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Handa's system that includes an intelligent TV further comprising a media scanner configured to populate a media table using data retrieved by the media browser as taught by Russell, for the advantage of entire media monitoring process.

As to Claim 12, the combination of Handa and Russell discloses the intelligent TV of Claim 11. Handa fails to disclose wherein the media scanner is further configured to aggregate data of DLNA and non-DLNA devices as a unified metadata. Russell discloses wherein the media scanner is further configured to aggregate data of DLNA and non-DLNA devices as a unified metadata (Content Manager 610 contains information about available media on local sources, network sources which may be DLNA devices, and internet sources (non-DLNA devices), through centralized media metadata, paragraphs [0043], [0069], [0073]). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the intelligent TV disclosed in Handa to include wherein the media scanner is further configured to aggregate data of DLNA and non-DLNA devices as a unified metadata, as taught in Russell, for the benefit of centralizing media information, improving efficiency of access.

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

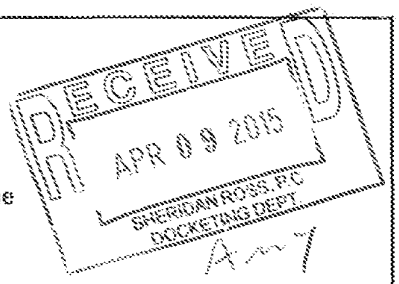
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



LENNOX-GENTLE, Thaine
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
02 April 2015 (02.04.2015)	
Applicant's or agent's file reference: 6583-498-PCT	IMPORTANT NOTICE

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055349	16 August 2013 (16.08.2013)	18 September 2012 (18.09.2012)

Applicant: FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer: Athina Nickitas-Etienne

e-mail: pt04.pct@wipo.int

VIZIO Ex. 1002, Page 3448 of 3573
VIZIO v. MMT, IPR2024-00722

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-498-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055349	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 18 September 2012 (18.09.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 24 March 2015 (24.03.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Athina Nickitas-Etienne e-mail: pt04.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*: 29 NOV 2013

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-498-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055349	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 5/445 (2013.01)
USPC - 725/39

Applicant: FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	20 November 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055349

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

☒ the international application in the language in which it was filed.

☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a)).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

a. (means)

☐ on paper

☐ in electronic form

b. (time)

☐ in the international application as filed

☐ together with the international application in electronic form

☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055349

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	None	YES
	Claims	1-20	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by Martin et al. hereinafter referred to as Martin.
Regarding Claim 1, Martin discloses a method, comprising: running, via a processor associated with an intelligent television (TV) (Para. [0049] regarding processor; Para. [0005] regarding systems and methods described herein relate to a portal for simultaneously viewing video channels, launching interactive applications, and/or interfacing with locally or remotely stored content), a live TV application, wherein the live TV application is configured to control one or more interactive user functions of the intelligent TV (Para. [0055] regarding Central processor 220 may be adapted to run a number of applications defining the functionality of STB; Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject); presenting, simultaneously via a display of the intelligent TV, live TV broadcast content (Fig. 7A regarding talkshow video 700; Para. [0088] regarding A given page may display a composite program consisting entirely of live video cells, a composite program containing some live video combined with locally displayed content), wherein the live TV broadcast content is presented to a first portion of the display (Fig. 7A regarding talkshow video 700 over the entire display); receiving a live TV application input at the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); determining, by the processor and in response to receiving the live TV application input, a live TV application feature to present via the display, wherein the one or more interactive user functions of the intelligent TV are controlled via the live TV application feature (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); and presenting, via the display, the live TV application feature to a second portion of the display (Fig. 7A regarding info content 704, 706, 708 within semitransparent bar 702; Fig. 7B regarding info cell 710, overlay 712), wherein the second portion of the display overlaps at least a portion of the presented live TV broadcast content (Para. [0122] regarding a semi-transparent bar 702 across the bottom of the screen that includes an information icon... the text may be in a semi-transparent background overlaid in the upper left corner of screen 700).

Regarding Claim 2, Martin discloses the method of claim 1, and further discloses wherein the live TV broadcast content includes at least one of a TV episode, a TV special, a movie, a sport event, and a radio program (Fig. 7A regarding talkshow video 700).

Regarding Claim 3, Martin discloses the method of claim 1, and further discloses wherein the live TV application input is provided automatically via the processor associated with the intelligent TV (Para. [0051] regarding Central processor 220 generally handles the processing of data within STB 1140. In the case of received audio and video signals, the MPEG packets containing these signals are demultiplexed and filtered).

Regarding Claim 4, Martin discloses the method of claim 1, and further discloses wherein live TV application input is provided by a user via a remote control associated with the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed).

Regarding Claim 5, Martin discloses the method of claim 1, and further discloses wherein presenting the live TV application feature further comprises presenting views and dialogs via the display of the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject; Para. [0055] regarding program guide applications).

Regarding Claim 6, Martin discloses the method of claim 1, and further discloses wherein the one or more interactive user functions of the intelligent TV include at least one of channel changing, channel viewing, program information viewing, setting reminders, clearing reminders, setting favorites, and clearing favorites (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject; Para. [0055] regarding program guide applications).

Regarding Claim 7, Martin discloses the method of claim 1, and further discloses wherein the live TV application is configured to communicate with at least one manager and provider of an operating system framework associated with the intelligent TV (Para. [0054] regarding a virtual machine interacting via an interface layer with a lower level operating system implemented in the hardware components... a device manager layer 304).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055349

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding Claim 8, Martin discloses the method of claim 1, and further discloses wherein the live TV application is configured to communicate with a system user interface (UI) application associated with the intelligent TV (Para. [0084] regarding All of the control data for configuring the mosaic is input via a graphical user interface).

Regarding Claim 9, Martin discloses the method of claim 8, wherein the system UI application is configured to automatically format one or more applications for use by the live TV application (Para. [0084] regarding The portal computer generates an MPEG-2 private mosaic table and injects it into the MPEG transport along with the composite program).

Regarding Claim 10, Martin discloses a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor (Para. [0049] regarding processor; Para. [0051] regarding The memory of STB 1140 may include EEPROM, host RAM, flash memory for software and data), perform the method comprising: running, via a processor associated with an intelligent television (TV), a live TV application, wherein the live TV application is configured to control one or more interactive user functions of the intelligent TV (Para. [0055] regarding Central processor 220 may be adapted to run a number of applications defining the functionality of STB; Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject); presenting, simultaneously via a display of the intelligent TV, live TV broadcast content (Fig. 7A regarding talkshow video 700; Para. [0088] regarding A given page may display a composite program consisting entirely of live video cells, a composite program containing some live video combined with locally displayed content), wherein the live TV broadcast content is presented to a first portion of the display (Fig. 7A regarding talkshow video 700 over the entire display); receiving a live TV application input at the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); determining, by the processor and in response to receiving the live TV application input, a live TV application feature to present via the display, wherein the one or more interactive user functions of the intelligent TV are controlled via the live TV application feature (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); and presenting, via the display, the live TV application feature to a second portion of the display (Fig. 7A regarding info content 704, 706, 708 within semitransparent bar 702; Fig. 7B regarding info cell 710, overlay 712), wherein the second portion of the display overlaps at least a portion of the presented live TV broadcast content (Para. [0122] regarding a semi-transparent bar 702 across the bottom of the screen that includes an information icon... the text may be in a semi-transparent background overlaid in the upper left corner of screen 700).

Regarding Claim 11, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the live TV broadcast content includes at least one of a TV episode, a TV special, a movie, a sport event, and a radio program (Fig. 7A regarding talkshow video 700).

Regarding Claim 12, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the live TV application input is provided automatically via the processor associated with the intelligent TV (Para. [0051] regarding Central processor 220 generally handles the processing of data within STB 1140. In the case of received audio and video signals, the MPEG packets containing these signals are demultiplexed and filtered).

Regarding Claim 13, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein live TV application input is provided by a user via a remote control associated with the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed).

Regarding Claim 14, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein presenting the live TV application feature further comprises presenting views and dialogs via the display of the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject; Para. [0055] regarding program guide applications).

Regarding Claim 15, martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the one or more interactive user functions of the intelligent TV include at least one of channel changing, channel viewing, program information viewing, setting reminders, clearing reminders, setting favorites, and clearing favorites (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject; Para. [0055] regarding program guide applications).

Regarding Claim 16, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the live TV application is configured to communicate with at least one manager and provider of an operating system framework associated with the intelligent TV (Para. [0054] regarding a virtual machine interacting via an interface layer with a lower level operating system implemented in the hardware components... a device manager layer 304).

Regarding Claim 17, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the live TV application is configured to communicate with a system user interface (UI) application associated with the intelligent TV (Para. [0084] regarding All of the control data for configuring the mosaic is input via a graphical user interface).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055349

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of

Regarding Claim 18, Martin discloses the tangible, non-transitory computer readable medium of claim 17, and further discloses wherein the system UI application is configured to automatically format one or more applications for use by the live TV application (Para. [0084] regarding The portal computer generates an MPEG-2 private mosaic table and injects it into the MPEG transport along with the composite program).

Regarding Claim 19, Martin discloses a system, comprising: an intelligent television (TV) having a display (Para. [0005] regarding systems and methods described herein relate to a portal for simultaneously viewing video channels, launching interactive applications, and/or interfacing with locally or remotely stored content) and a tuner (Para. [0050] regarding STB 1140 also includes a tuner 24), wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (Para. [0050] regarding STB 1140 also includes a tuner 242 and demodulator 244 (e.g., a 256 QAM demodulator) to receive and demodulate the received transmissions which are then filtered and demultiplexed by unit 240); an input device associated with the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); a memory (Para. [0049] regarding STB 1140 includes a central processor 220 including associated memory elements); and a microprocessor (Para. [0049] regarding STB 1140 includes a central processor 220 including associated memory elements and adapted to receive input data from...remote) operable to: run a live TV application (Para. [0049] regarding processor; Para. [0005] regarding systems and methods described herein relate to a portal for simultaneously viewing video channels, launching interactive applications, and/or interfacing with locally or remotely stored content), wherein the live TV application is configured to control one or more interactive user functions of the intelligent TV (Para. [0055] regarding Central processor 220 may be adapted to run a number of applications defining the functionality of STB; Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject); present, simultaneously via the display of the intelligent TV, live TV broadcast content (Fig. 7A regarding talkshow video 700; Para. [0088] regarding A given page may display a composite program consisting entirely of live video calls, a composite program containing some live video combined with locally displayed content), wherein the live TV broadcast content is presented to a first portion of the display (Fig. 7A regarding talkshow video 700 over the entire display); receive a live TV application input at the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); determine, in response to receiving the live TV application input, a live TV application feature to present via the display, wherein the one or more interactive user functions of the intelligent TV are controlled via the live TV application feature (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); and present, via the display, the live TV application feature to a second portion of the display (Fig. 7A regarding info content 704, 706, 708 within semitransparent bar 702; Fig. 7B regarding info cell 710, overlay 712), wherein the second portion of the display overlaps at least a portion of the presented live TV broadcast content (Para. [0122] regarding a semi-transparent bar 702 across the bottom of the screen that includes an information icon... the text may be in a semi-transparent background overlaid in the upper left corner of screen 700).

Regarding Claim 20, Martin discloses the system of claim 19, and further discloses wherein live TV application input is provided by a user via the input device associated with the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus industrial applicability has been met because the subject matter claimed can be made or used in industry.

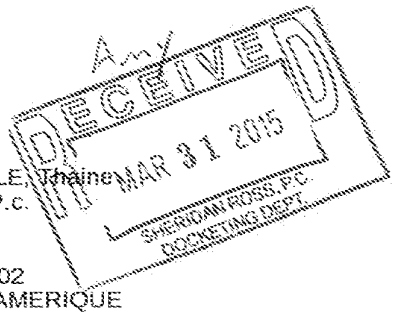
PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:



LENNOX-GENTLE, Thaine
Sheridan Ross P.c.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
26 February 2015 (26.02.2015)	
Applicant's or agent's file reference	IMPORTANT NOTICE
6583-509-PCT	

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055298	16 August 2013 (16.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Kihwan Moon
Facsimile No. +41 22 338 82 70	e-mail: pt01.pct@wipo.int

Form PCT/IB/326 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-509-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055298	International filing date *(day/month/year)* 16 August 2013 (16.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Kihwan Moon
Facsimile No. +41 22 338 82 70	e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

From the
INTERNATIONAL SEARCHING AUTHORITY

To: THAINE LENNOX-GENTLE
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)* 29 NOV 2013

Applicant's or agent's file reference
6583-509-PCT

FOR FURTHER ACTION
See paragraph 2 below

International application No	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055298	16 August 2013	17 August 2012

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04N 7/173 (2013.01)
USPC - 725/27

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	11 November 2013	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055298

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-20 lack an inventive step under PCT Article 33(3) as being obvious over Begeja et al., hereinafter referred to as Begeja in view of Epstein et al., hereinafter referred to as Epstein.

Regarding claims 1, 10, 19 Begeja discloses a method, comprising (a method for providing a personalized channel to a customer using a TV 236 and a set top box 332 to access broadcast channels over the network 230, abstract, fig.3, para 0041), a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor, perform the method [claim 10] (fig.5 shows a processor element 502, a memory 504, [the memory includes instructions to be executed], para 0061, 0062)
a system, comprising: an intelligent television (TV) having a display and a tuner, wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display; an input device associated with the intelligent TV; a memory; and a microprocessor operable [claim 19] (a method for providing a personalized channel to a customer using a TV 236 and a set top box 332 to access broadcast channels over the network 230, and a remote control to allow the user to click on the desired programs, abstract, fig.3, para 0039, 0047; fig.5 shows a processor element 502, a memory 504, [the memory includes instructions to be executed], and includes input devices keyboard, mouse, para 0061, 0062):
detecting a first signal source change made at an intelligent television (TV) (fig.4 shows the step 450 wherein the method determines if the user provides a feedback, the feedback is a change of program, if the customer indicates changing to a movie program at step 450 then the result is "yes" and the method goes to step 410 then the users profile of interest is updated, para 0059, 0051; a customer using a TV 236 and a set top box 332 to access broadcast channels over the network 230 [TV accessing set top box and further a user is provided with an option provide feedback through the TV it is interpreted as intelligent television], fig.3, para 0041);
sending a first notification of the first signal source change detected to a live TV application (fig.4 shows at step 450 when a change is detected then the method proceeds to step 410 to update the user preferences in the users profile [updating the user profile upon a change of channel detection is interpreted as sending a first notification of the first signal source change], para 0059, 0051, 0052; a customer clicks through a plurality of channels quickly and further dwells on a particular channel for some time and further upon seeing a commercial clicks through a plurality of channels [interpreted as live TV application], para 0044), wherein the first notification includes first viewing information associated with the first signal source change (fig.4 shows at step 450 when a change is detected then the method proceeds to step 410 to update the user preferences in the users profile [updating the user preferences is interpreted as first viewing information associated], para 0059, 0051, 0052; fig.4 shows in step 430 the user profile is updated , if a viewer is watching a basketball game and the user is presented with an option of changing to another basketball games through the program guide, further the users feedback [first viewing information associated with the first signal source change] is determined if the user has changed to another channel, if yes this information is then used to update the users profile of interest, para 0055, 0056);
storing, in a memory associated with the intelligent TV, the first viewing information associated with the first signal source change (fig.3 shows a profile data base 350 [storing in a memory] at the service provider which stores users profile, para 0044; fig.4 shows in step 430 the user profile is updated , if a viewer is watching a basketball game and the user is presented with an option of changing to another basketball games through the program guide, further the users feedback [first viewing information associated with the first signal source change] is determined if the user has changed to another channel, if yes this information is then used to update the users profile of interest [the profile database 350 which includes the users profile is updated], para 0055, 0056);
and associating the first viewing information with a user of the intelligent TV (fig.4 shows in step 430 the user profile is updated , if a viewer is watching a basketball game and the user is presented with an option of changing to another basketball games through the program guide, further the users feedback is determined if the user has changed to another channel, if yes this information is then used to update the users profile of interest [updating the profile of a user based on the users feedback is interpreted as associating the first viewing information with a user], para 0055, 0056), but lacks the teaching of storing, in a memory associated with the intelligent TV, the first viewing information.
Epstein is in the field of a television widget running on a processor providing video images and identifying an operating state of the television (abstract) and teaches storing, in a memory associated with the intelligent TV, the information (fig.1 shows a TV 20 which includes a processor 72, a RAM 78, ROM 80 and a storage disc 92 for mass storage for storing large program files, para 0025; relevant videos are stored within the memory 82 or 90 in the television which are accessed, para 0037). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Epstein to incorporate storing, in a memory associated with the intelligent TV, the first viewing information into the invention of Begeja. The motivation would have been to provide a simple and less complex functionality mechanism for a television device to optimize user experience (see Epstein para 0020).

VIZIO Ex. 1002, Page 3459 of 3573
VIZIO v. MMT, IPR2024-00722

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055298

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Regarding claims 2, 11, 20, Begeja further teaches wherein the first signal source change is made by the user (fig.4 shows the step 450 wherein the method determines if the user provides a feedback, the feedback is a change of program, if the customer indicates changing to a movie program at step 450 then the result is "yes" and the method goes to step 410 then the users profile of interest is updated, para 0059, 0051).

Regarding claims 3, 12, Begeja further teaches comprising: detecting a second signal source change made at the intelligent TV (a customer clicks through a plurality of channels and dwells for some time at a particular channel [first signal source change], and the again clicks through a plurality of channels quickly to another program channel [second signal source change], and the set top box gathers the information of the users viewing selections for each program channel for a period of time, para 0044; fig.4 shows the step 450 wherein the method determines if the user provides a feedback, the feedback is a change of program, if the customer indicates changing to a movie program at step 450 then the result is "yes" and the method goes to step 410 then the users profile of interest is updated, para 0059, 0051); sending a second notification of the second signal source change detected to the live TV application (fig.4 shows at step 450 when a change is detected then the method proceeds to step 410 to update the user preferences in the users profile [updating the user profile upon a change of channel detection is interpreted as sending a notification of the signal source change], para 0059, 0051, 0052; a customer clicks through a plurality of channels and dwells for some time at a particular channel [first signal source change], and the again clicks through a plurality of channels quickly to another program channel [second signal source change], and the set top box gathers the information of the users viewing selections [a second notification of the second signal source change] for each program channel for a period of time, para 0044), wherein the second notification includes second viewing information associated with the second signal source change (fig.4 shows at step 450 when a change is detected then the method proceeds to step 410 to update the user preferences in the users profile [updating the user preferences is interpreted as first viewing information associated], para 0059, 0051, 0052; a customer clicks through a plurality of channels and dwells for some time at a particular channel [first signal source change], and the again clicks through a plurality of channels quickly to another program channel [second signal source change], and the set top box gathers the information of the users viewing selections [second viewing information] for each program channel for a period of time, para 0044); storing, in the memory, the second viewing information associated with the second signal source change (a customer clicks through a plurality of channels and dwells for some time at a particular channel [first signal source change], and the again clicks through a plurality of channels quickly to another program channel [second signal source change], and the set top box gathers the information [storing, in the memory the second viewing] of the users viewing selections for each program channel for a period of time, para 0044;fig.3 shows a profile data base 350 [storing in a memory] at the service provider which stores users profile, para 0044; fig.4 shows in step 430 the user profile is updated , if a viewer is watching a basketball game and the user is presented with an option of changing to another basketball games through the program guide, para 0055, 0056); and associating the second viewing information with the user of the intelligent TV (a customer clicks through a plurality of channels and dwells for some time at a particular channel [first signal source change], and the again clicks through a plurality of channels quickly to another program channel [second signal source change], and the set top box gathers the information [storing, in the memory the second viewing] of the users viewing selections for each program channel for a period of time and is used to determine the users interest in variety of programs [interpreted as associating the second viewing information with the user], para 0044), but lacks the teaching of storing, in the memory associated with the intelligent TV.
Epstein is in the field of a television widget running on a processor providing video images and identifying an operating state of the television (abstract) and teaches storing, in a memory associated with the intelligent TV, the information (fig.1 shows a TV 20 which includes a processor 72, a RAM 78, ROM 80 and a storage disc 92 for mass storage for storing large program files, para 0025; relevant videos are stored within the memory 82 or 90 in the television which are accessed, para 0037). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Epstein to incorporate storing, in a memory associated with the intelligent TV, the first viewing information into the invention of Begeja. The motivation would have been to provide a simple and less complex functionality mechanism for a television device to optimize user experience (see Epstein para 0020).

Regarding claims 4, 13, Begeja further teaches comprising: comparing, via a processor associated with the intelligent TV, the stored first viewing information with the stored second viewing information (a customer clicks through a plurality of channels and dwells for some time at a particular channel [first signal source change], and the again clicks through a plurality of channels quickly to another program channel [second signal source change], and the set top box gathers the information [storing, in the memory the second viewing] of the users viewing selections for each program channel for a period of time, para 0044; fig.4 shows a method 400 which at step 430 is presented with another program channel of interest to the user which the user may select, in step 450 the users feedback is noted, a feedback check is made and if the feedback is a change which is "yes" i.e. change in the current channel to another channel then the personalized user preferences data is updated [the step 450 to determine the feedback includes a new channel/change is interpreted as comparing], para 0055, 0056, 0059); and determining, via the processor, at least one match between the first and second viewing information (fig.4 shows a method 400 which at step 430 is presented with another program channel of interest to the user which the user may select, in step 450 the users feedback is noted, a feedback check is made and if the feedback does not include a change which is "no" the process returns to step 460, further in step 450 the users feedback is noted, if the feedback is a change which is "yes" i.e. change in the current channel to another channel then the personalized user preferences data is updated [interpreted as a matching between first and second viewing information], para 0055, 0056, 0059).

Regarding claims 5, 14, Begeja further teaches comprising: determining, based at least partially on the determined at least one match, a user viewing behavior associated with the user (fig.4 shows a method 400 which at step 430 is presented with another program channel of interest to the user which the user may select, in step 450 the users feedback is noted, a feedback check is made and if the feedback does not include a change which is "no" the process returns to step 460, further in step 450 the users feedback is noted, if the feedback is a change which is "yes" i.e. change in the current channel to another channel then the personalized user preferences data is updated [interpreted as an user viewing behavior], para 0055, 0056, 0059).

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding claims 6, 15, Begeja further teaches wherein the at least one match is at least one of a time associated with the first and second signal source change, a channel associated with the first and second signal source change (fig.4 shows a method 400 which at step 430 is presented with another program channel of interest to the user which the user may select, in step 450 the users feedback is noted, a feedback check is made and if the feedback does not include a change which is "no" the process returns to step 460, further in step 450 the users feedback is noted, if the feedback is a change which is "yes" i.e. change in the current channel to another channel [channel associated with first and second signal source change] then the personalized user preferences data is updated, para 0055, 0056, 0059), TV content associated with the first and second signal source change, and a viewing time of the TV content associated with the first and second signal source.

Regarding claims 7, 16, Begeja further teaches wherein detecting the first signal source change further comprises: setting a listener associated with the live TV application of the intelligent TV (fig.4 shows a method 400 which at step 430 is presented with another program channel of interest to the user which the user may select, in step 450 the users feedback is noted, a feedback check [interpreted as setting a listener] is made and if the feedback does not include a change which is "no" the process returns to step 460, further in step 450 the users feedback is noted, if the feedback is a change which is "yes" i.e. change in the current channel to another channel then the personalized user preferences data is updated, para 0055, 0056, 0059; a customer clicks through a plurality of channels quickly and further dwells on a particular channel for some time and further upon seeing a commercial clicks through a plurality of channels [interpreted as live TV application], para 0044); monitoring, via the listener, an event associated with at least one signal source of the intelligent TV, wherein the event includes changing from a first signal source to a second signal source of the intelligent TV (fig.4 shows a method 400 which at step 430 is presented with another program channel of interest to the user which the user may select, in step 450 the users feedback is noted, a feedback check [interpreted as setting a listener] is made and if the feedback does not include a change which is "no" the process returns to step 460, further in step 450 the users feedback is noted, if the feedback is a change which is "yes" i.e. change in the current channel to another channel [changing from a first signal source to a second signal source] then the personalized user preferences data is updated, para 0055, 0056, 0059) and identifying, via the live TV application, an occurrence of the event associated with the at least one signal source of the intelligent TV (fig.4 shows a method 400 which at step 430 is presented with another program channel of interest to the user which the user may select, in step 450 the users feedback is noted, a feedback check [interpreted as setting a listener] is made and if the feedback does not include a change which is "no" the process returns to step 460, further in step 450 the users feedback is noted, if the feedback is a change which is "yes" [identifying an occurrence of the event] i.e. change in the current channel to another channel [changing from a first signal source to a second signal source] then the personalized user preferences data is updated, para 0055, 0056, 0059).

Regarding claims 8, 17, Begeja further teaches wherein the first signal source corresponds to a first live TV channel and the second signal source corresponds to a second live TV channel (a customer clicks through a plurality of channels and dwells for some time at a particular channel [first signal source change], and the again clicks through a plurality of channels quickly [interpreted as live TV channels] to another program channel [second signal source change], and the set top box gathers the information [storing, in the memory the second viewing] of the users viewing selections for each program channel for a period of time, para 0044) .

Regarding claims 9, 18, Begeja further teaches wherein the listener is set automatically via the live TV application (fig.4 shows a method 400 which at step 430 a viewer is watching a basketball game and is presented with another program channel of interest to the user which the user may select, in step 450 the users feedback is noted, a feedback check [interpreted as setting a listener] is made and if the feedback does not include a change which is "no" the process returns to step 460, further in step 450 the users feedback is noted, if the feedback is a change which is "yes" i.e. change in the current channel to another channel then the personalized user preferences data is updated [as the updating is performed based on the users feedback for the live channels it is interpreted as listener is set via the live TV application], para 0055, 0056, 0059).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

VIZIO Ex. 1002, Page 3461 of 3573
VIZIO v. MMT, IPR2024-00722

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

AU, Yiu, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-519-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055567	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Simin Baharlou

e-mail: pt09.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-519-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055567	International filing date *(day/month/year)* 19 August 2013 (19.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☒	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Simin Baharlou e-mail: pt09.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Yiu F. Au
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	20 DEC 2013
Applicant's or agent's file reference 6583-519-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55567	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 3/00, 13/00; H04N 5/445, 7/14 (2013.01)
USPC - 725/037, 39; 348/14.07

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [x] Box No. VII Certain defects in the international application
- [x] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	2 November 2013 (02.11.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55567

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55567

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	NONE	YES
	Claims	1-20	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by US 2011/0276995 A1 to Alten et al. (hereinafter 'Alten').

As to claim 1, Alten discloses an EPG data service (electronic program guide to operate as a shell or window to provide the user with the capability to access other applications, paragraph [0022]) for an Intelligent TV (television receiver 27), comprising: a plurality of source plugins configured to receive EPG information from a plurality of respective EPG information sources (the electronic program guide (EPG) to operate as a shell or window to provide the user with the capability to access other applications (plugins) or information systems (information sources) which are not part of the electronic program guide application or data, paragraph [0022]); an EPG subservice configured to aggregate the EPG information received by the plurality of source plugins (Each of these keys indicates to the program schedule system a distinct user-created "Channel Preference" or "Favorite Channel" list, which is a listing of a specific subset (EPG subservice) of channels for a particular user, arranged in the sequential order that the user wishes to view during operation of the program schedule system, paragraph [0099]); an EPG database configured to store the aggregated EPG information from the EPG subservice (electronic program guide (EPG) application software updates, is stored in a read only memory (ROM) 17. The microcontroller 16 uses the received program schedule information to build a database (EPG database) by storing the data in appropriately organized records (aggregated EPG information), paragraph [0084]); and an EPG provider configured to provide a relevant portion of the aggregated EPG information to an application of the Intelligent TV (The data provider is a program information provider, the satellite uplink manager, a local cable operator, or a combination of these sources, and the data stream contains program schedule information for all television programs and other services available, paragraph [0081]).

As to claim 2, Alten discloses the EPG data service of claim 1, wherein the EPG database is configured to store the aggregated EPG information relevant to programs within a pre-defined time interval (The microcontroller 16 uses the received program schedule information to build a database by storing the data in appropriately organized records in dynamic random access memory (DRAM) 18. The stored schedule information can be updated on a periodic basis, such as hourly, daily or weekly, or at any time when changes in scheduling or other factors warrant an update, paragraph [0084]).

As to claim 3, Alten discloses the EPG data service of claim 1, wherein the aggregated EPG information comprises data fields that includes one or more of an identifier, a name description, a start date and/or time, and a duration (The schedule information presented includes the name of the program and program start/stop time, paragraph [0113]).

As to claim 4, Alten discloses the EPG data service of claim 1, further comprising a tag subservice configured to receive notification from a second application of the Intelligent TV to set or unset tags for programs or channels, store the tag in a database, and serve the EPG subservice with information regarding tagged programs or channels (The REMINDER message 130 (notification) queries the user as to whether the system should remind the user, at a predetermined time before the start of the selected program (tagged program), that he or she would like to view the selected program, as shown in FIG. 13. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user has set a reminder, paragraph [0115]).

As to claim 5, Alten discloses the EPG data service of claim 4, wherein, on startup of the Intelligent TV, the tag subservice is configured to reschedule alarms in an alarm manager of the Intelligent TV for programs or channels tagged as a reminder, wherein the alarm manager is configured to notify the tag subservice when a time for a scheduled reminder is reached, and wherein the tag subservice is configured to notify the second application regarding the scheduled reminder (The REMINDER message 130 (notification/alarm) queries the user as to whether the system should remind the user, at a predetermined time (time for a scheduled reminder) before the start of the selected program (tagged program), that he or she would like to view the selected program, as shown in FIG. 13. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user has set a reminder, paragraph [0115]).

As to claim 6, Alten discloses the EPG data service of claim 1, further comprising a thumbnail cache manager configured to store thumbnails in a database and serve the thumbnails to the application (All Listings icon (thumbnail) in the top horizontal bar 61 of FIG. 6 identifies a "Category Listing" mode in which program schedule information is displayed and categorized by program content, as shown in FIG. 19. The particular listing shown in FIG. 19 includes the categories of Movies, Sports, News and Children 190A-190D. The database record stored for each listing contains a content-specific identifier (icon/thumbnail) so the microcontroller can search the database and categorize the information by content for purposes of displaying it in the Category Listing mode, paragraph [0125]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55567

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claims 8, 12, and 18 contain the following defects in the form or contents thereof:

Claim 8, line 2, change "Intelligenttelevision" to "Intelligent Television".

Claim 12, line 2, delete "a".

Claim 18, line 3, delete "a".

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55567

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fu lly supported by the description, are made:

Claim 4, 11-12, and 17 are objected to under PCT Article 6 as lacking clarity, because claim 4, 11-12, and 17 are indefinite for the following reason(s):

Claims 4, 11, and 17, lines 3, 3, and 5 respectively, "the tag" lacks antecedent basis. It is unclear which tag of the previously recited "tags" is intended.

Claim 12, lines 3-4, "the tag subservice" lacks antecedent basis.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55567

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Box V: Citations and Explanations-***-

As to claim 7, Alten discloses the EPG data service of claim 6, wherein the EPG subservice is configured to serve to the application a uniform resource identifier (URI) for each thumbnail in the aggregated EPG information, and wherein the thumbnail cache manager is configured to serve a thumbnail to the application based on the URI (The particular listing shown in FIG. 19 includes the categories of Movies, Sports, News and Children 190A-190D (EPG subservice). The database record stored for each listing contains a content-specific identifier so the microcontroller can search the database and categorize the information by content for purposes of displaying it in the Category Listing mode, paragraph [0125]).

As to claim 8, Alten discloses a method of managing Electronic Programming Guide (EPG) information (electronic program guide to operate as a shell or window to provide the user with the capability to access other applications, paragraph [0022]) for an Intelligent television (TV) (television receiver 27), comprising: receiving EPG information from a plurality of EPG sources (the electronic program guide (EPG) to operate as a shell or window to provide the user with the capability to access other applications or information systems (information sources) which are not part of the electronic program guide application or data, paragraph [0022]); aggregating the EPG information from the plurality of EPG sources (Each of these keys indicates to the program schedule system a distinct user-created "Channel Preference" or "Favorite Channel" list, which is a listing of a specific subset (EPG subservice) of channels for a particular user, arranged in the sequential order that the user wishes to view during operation of the program schedule system, paragraph [0099]); storing the aggregated EPG information in a database (electronic program guide (EPG) application software updates, is stored in a read only memory (ROM) 17. The microcontroller 16 uses the received program schedule information to build a database (EPG database) by storing the data in appropriately organized records (aggregated EPG information), paragraph [0084]); and providing a relevant portion of the aggregated EPG information to an application of the Intelligent TV (The data provider is a program information provider, the satellite uplink manager, a local cable operator, or a combination of these sources, and the data stream contains program schedule information for all television programs and other services available, paragraph [0081]).

As to claim 9, Alten discloses the method of claim 8, wherein the storing step comprises storing the aggregated EPG information relevant to programs within a pre-defined time interval (The microcontroller 16 uses the received program schedule information to build a database by storing the data in appropriately organized records in dynamic random access memory (DRAM) 18. The stored schedule information can be updated on a periodic basis, such as hourly, daily or weekly, or at any time when changes in scheduling or other factors warrant an update, paragraph [0084]).

As to claim 10, Alten discloses the method of claim 8, the aggregated EPG information comprises data fields that include one or more of an identifier, a name description, a start date and/or time, and a duration (The schedule information presented includes the name of the program and program start/stop time, paragraph [0113]).

As to claim 11, Alten discloses the method of claim 8, further comprising receiving notification from a second application of the Intelligent TV to set or unset tags for programs or channels, storing the tag in a second database, and retrieving EPG information from the database based on information regarding tagged programs or channels (The REMINDER message 130 (notification/alarm) queries the user as to whether the system should remind the user, at a predetermined time (time for a scheduled reminder) before the start of the selected program (tagged program), that he or she would like to view the selected program, as shown in FIG. 13. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user has set a reminder, paragraph [0115]).

As to claim 12, Alten discloses the method of claim 11, further comprising, on a startup of the Intelligent TV, rescheduling alarms in an alarm manager of the Intelligent TV for programs or channels tagged as a reminder, wherein the alarm manager is configured to notify the tag subservice when a time for a scheduled reminder is reached; and notifying the second application regarding the scheduled reminder (The REMINDER message 130 (notification/alarm) queries the user as to whether the system should remind the user, at a predetermined time (time for a scheduled reminder) before the start of the selected program (tagged program), that he or she would like to view the selected program, as shown in FIG. 13. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user has set a reminder, paragraph [0115]).

As to claim 13, Alten discloses the method of claim 8, further comprising serving to the application a uniform resource identifier (URI) for each thumbnail in the aggregated EPG information; and serving a thumbnail to the application based on the URI (The particular listing shown in FIG. 19 includes the categories of Movies, Sports, News and Children 190A-190D (EPG subservice). The database record stored for each listing contains a content-specific identifier so the microcontroller can search the database and categorize the information by content for purposes of displaying it in the Category Listing mode, paragraph [0125]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55567

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claim 14, Alten discloses an Intelligent TV comprising an application configured to display EPG information on the Intelligent TV and an EPG data service, the EPG data service comprising (the television receiver or display (intelligent TV) of schedule information in any of the operating modes of the electronic program guide (EPG), paragraph [0171]): a plurality of source plugins configured to receive EPG information from a plurality of respective EPG information sources (the electronic program guide (EPG) to operate as a shell or window to provide the user with the capability to access other applications (plugins) or information systems (information sources) which are not part of the electronic program guide application or data, paragraph [0022]); an EPG subservice configured to aggregate the EPG information received by the plurality of source plugins (Each of these keys indicates to the program schedule system a distinct user-created "Channel Preference" or "Favorite Channel" list, which is a listing of a specific subset (EPG subservice) of channels for a particular user, arranged in the sequential order that the user wishes to view during operation of the program schedule system, paragraph [0099]); an EPG database configured to store the aggregated EPG information from the EPG subservice (electronic program guide (EPG) application software updates, is stored in a read only memory (ROM) 17. The microcontroller 16 uses the received program schedule information to build a database (EPG database) by storing the data in appropriately organized records (aggregated EPG information), paragraph [0084]); and an EPG provider configured to provide a relevant portion of the aggregated EPG information to the application (The data provider is a program information provider, the satellite uplink manager, a local cable operator, or a combination of these sources, and the data stream contains program schedule information for all television programs and other services available, paragraph [0081]).

As to claim 15, Alten discloses the Intelligent TV of claim 14, wherein the EPG database is configured to store the aggregated EPG information relevant to programs within a pre-defined time interval (The microcontroller 16 uses the received program schedule information to build a database by storing the data in appropriately organized records in dynamic random access memory (DRAM) 18. The stored schedule information can be updated on a periodic basis, such as hourly, daily or weekly, or at any time when changes in scheduling or other factors warrant an update, paragraph [0084]).

As to claim 16, Alten discloses the Intelligent TV of claim 14, wherein the aggregated EPG information comprises data fields that includes one or more of an identifier, a name description, a start date and/or time, and a duration (The schedule information presented includes the name of the program and program start/stop time, paragraph [0113]).

As to claim 17, Alten discloses the Intelligent TV of claim 14, further comprising a second application configured to output and receive user input regarding tags for programs and channels, wherein the EPG data service further comprises a tag subservice configured to receive notification from the second application to set or unset tags for programs or channels, store the tag in a database, and serve the EPG subservice with information regarding tagged programs or channels (The REMINDER message 130 (notification) queries the user as to whether the system should remind the user, at a predetermined time before the start of the selected program (tagged program), that he or she would like to view the selected program, as shown in FIG. 13. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user has set a reminder, paragraph [0115]).

As to claim 18, Alten discloses the Intelligent TV of claim 17, further comprising an alarm manager, wherein, on startup of the Intelligent TV, the tag subservice is configured to reschedule alarms in an alarm manager of the Intelligent TV for programs or channels tagged as a reminder, wherein the alarm manager is configured to notify the tag subservice when a time for a scheduled reminder is reached, and wherein the tag subservice is configured to notify the second application regarding the scheduled reminder (The REMINDER message 130 (notification/alarm) queries the user as to whether the system should remind the user, at a predetermined time (time for a scheduled reminder) before the start of the selected program (tagged program), that he or she would like to view the selected program, as shown in FIG. 13. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user has set a reminder, paragraph [0115]).

As to claim 19, Alten discloses the Intelligent TV of claim 14, wherein the EPG data service further comprises a thumbnail cache manager configured to store thumbnails in a database and serve the thumbnails to the application (All Listings icon (thumbnail) in the top horizontal bar 61 of FIG. 6 identifies a "Category Listing" mode in which program schedule information is displayed and categorized by program content, as shown in FIG. 19. The particular listing shown in FIG. 19 includes the categories of Movies, Sports, News and Children 190A-190D. The database record stored for each listing contains a content-specific identifier (icon/thumbnail) so the microcontroller can search the database and categorize the information by content for purposes of displaying it in the Category Listing mode, paragraph [0125]).

As to claim 20, Alten discloses the Intelligent TV of claim 19, wherein the EPG subservice is configured to serve to the application a uniform resource identifier (URI) for each thumbnail in the aggregated EPG information, and wherein the thumbnail cache manager is configured to serve a thumbnail to the application based on the URI (The particular listing shown in FIG. 19 includes the categories of Movies, Sports, News and Children 190A-190D (EPG subservice). The database record stored for each listing contains a content-specific identifier so the microcontroller can search the database and categorize the information by content for purposes of displaying it in the Category Listing mode, paragraph [0125]).

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

To:

AU, Yiu, F.
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 26 February 2015 (26.02.2015)	
Applicant's or agent's file reference 6583-520-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2013/055570	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

Applicant
FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Simin Baharlou

e-mail: pt09.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 6583-520-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2013/055570	International filing date *(day/month/year)* 19 August 2013 (19.08.2013)	Priority date *(day/month/year)* 17 August 2012 (17.08.2012)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FLEXTRONICS AP, LLC		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Simin Baharlou e-mail: pt09.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Yiu F. Au
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, Colorado 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	22 NOV 2013

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-520-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US13/55570	19 August 2013 (19.08.2013)	17 August 2012 (17.08.2012)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 3/00, 13/00; H04N 5/445, 7/14 (2013.01)
USPC - 725/037, 39, 40; 348/14.07

Applicant Flextronics AP, LLC

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	11 November 2013 (11.11.2013)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55570

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55570

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	NONE	YES
	Claims	1-20	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by US 7,174,126 B2 McElhatten et al. (hereinafter "McElhatten").

As to claim 1, McElhatten discloses a method of displaying Electronic Programming Guide (EPG) information on an Intelligent television (TV), comprising: (accessing and locating the desired program from the interactive program guide (electronic programming guide EPG) is a menu including different reservation options for selections is displayed on the TV screen (intelligent television), column 16, lines 30-32 and column 14, lines 7-8) displaying an in-use portion on a screen of the Intelligent TV (GUI 1900 comprises window 1903 which displays thereon an in-progress HBO program, Figure 31, column 32, lines 42-43); and displaying a partial portion on the screen, comprising displaying a favorite channel portion showing EPG information for a plurality of favorite tagged channels (A channel may be designated as a "Favorite Channel" by selecting "Favorite Channels" from the Favorites menu 1420 or by pressing FAV key 980 of remote control 900. Once a user has defined one or more Favorite channels, the user can toggle interactive program guide 1020 to display only Favorite channels and re-toggle back to the full list of channels, Figure 24, column 26, line 64 through column 27, line 4) and a favorite show portion showing EPG information for a plurality of favorite tagged shows (Reserve GUI 5520 is displayed, providing the user with two reserve options (5530): (1) reserve the program, and (2) select a season pass. The program reserve option which is highlighted as the default choice enables a user to select a program to be added to a user's Favorite Show list which becomes available for viewing after the program has broadcast. Program guide 5510b is then redisplayed, Figure 23, column 17, lines 3-10).

As to claim 2, McElhatten discloses the method of claim 1, wherein the partial portion overlays the in-use portion (GUI 1900 comprises window 1903 (overlays) which displays thereon an in-progress HBO program, Figure 31, column 32, lines 42-43).

As to claim 3, McElhatten discloses the method of claim 1, wherein the in-use portion comprises a currently playing TV program (GUI 1900 comprises window 1903 which displays thereon an in-progress HBO program (currently playing TV program), Figure 31, column 32, lines 42-43).

As to claim 4, McElhatten discloses the method of claim 1, wherein the partial portion resizes the in-use portion (GUI 1900 comprises window 1903 (resized into smaller corner window) which displays thereon an in-progress HBO program (currently playing TV program), Figure 31, column 32, lines 42-43).

As to claim 5, McElhatten discloses the method of claim 1, wherein the plurality of favorite tagged shows is a plurality of shows that are currently airing (Users can reserve programs that are currently being broadcast while they are watching the program or from an interactive program guide, Figure 23, column 15, lines 37-42).

As to claim 6, McElhatten discloses the method of claim 1, wherein the partial portion is generated by an EPG display application of the Intelligent TV (GUI 1900 comprises window 1903 (overlays) which displays thereon an in-progress HBO program, Figure 31, column 32, lines 42-43).

As to claim 7, McElhatten discloses the method of claim 6, wherein the EPG display application is configured to retrieve the EPG information for the plurality of favorite tagged channels and the plurality of favorite tagged shows through an EPG subservice, wherein the EPG subservice is configured to retrieve channels and shows tagged as favorite through a tag subservice (By accessing Home GUI 1030, a user is prompted to select one of the programming features listed in menu 1110. By selecting Favorites feature 1410 of menu 1110, the user accesses Favorites submenu 1420 on Favorites GUI 1400 which offers several choices concerning the Favorites feature. For example, in this instance the user can choose from: creating a new profile, deleting an existing profile, adding parameters to an existing profile, finding favorite channels or shows and excluding channels, Figure 23, column 25, line 64 through column 26, line 6).

As to claim 8, McElhatten discloses the method of claim 7, wherein a second application is configured to set and clear favorite tags for channels and shows through the tag subservice (By selecting Favorites feature 1410 of menu 1110, the user accesses Favorites submenu 1420 on Favorites GUI 1400 which offers several choices concerning the Favorites feature. For example, in this instance the user can choose from: creating (set) a new profile, deleting (clear) an existing profile, adding parameters to an existing profile, finding favorite channels or shows and excluding channels, Figure 23, column 25, line 65 through column 26, line 6).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55570

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As to claim 9, McElhatten discloses the method of claim 6, wherein the EPG display is configured to retrieve and display thumbnails for channels and shows through a thumbnail cache manager, wherein uniform resource identifiers (URIs) for each thumbnail is in the EPG information retrieved through the EPG subservice, and wherein the thumbnail cache manager is configured to serve each thumbnail using the respective URI (Figure 31, What's Hot feature to reserve certain HBO programs (channel) through their promotional previews, the user may select a "What's Hot!" option, denoted 1925. Similar to a What's Hot preview, a thumbnail preview, denoted 1931, may be used to reserve the program (show) e.g., "The Gathering Storm" featured in the preview in advance of the broadcast of the program e.g., on April 27. To make such a reservation, the user may highlight and select preview 1931, Figure 31, column 32, line 63 through column 33, line 5).

As to claim 10, McElhatten discloses a display for an Intelligent television (TV), comprising a live TV display and an Electronic Programming Guide (EPG) display, the EPG display is positioned at a side of the live TV display (GUI 1900 comprises window 1903 which displays thereon an in-progress HBO program, Figure 31, column 32, lines 42-43) and comprising: a favorite channel portion showing EPG information for a plurality of favorite tagged channels (A channel may be designated as a "Favorite Channel" by selecting "Favorite Channels" from the Favorites menu 1420 or by pressing FAV key 980 of remote control 900. Once a user has defined one or more Favorite channels, the user can toggle interactive program guide 1020 to display only Favorite channels and re-toggle back to the full list of channels, Figure 24, column 26, line 64 through column 27, line 4); and a favorite show portion showing EPG information for a plurality of favorite tagged shows, wherein an EPG display application is configured to generate the EPG display portion and retrieve the EPG information for the plurality of favorite tagged channels and the plurality of favorite tagged shows through an EPG subservice, wherein the EPG subservice is configured to retrieve channels and shows tagged as favorite through a tag subservice (Reserve GUI 5520 is displayed, providing the user with two reserve options (5530): (1) reserve the program, and (2) select a season pass. The program reserve option which is highlighted as the default choice enables a user to select a program to be added to a user's Favorite Show list which becomes available for viewing after the program has broadcast. Program guide 5510b is then redisplayed, Figure 23, column 17, lines 3-10), and wherein a second application is configured to set and clear favorite tags for channels and shows through the tag subservice (By selecting Favorites feature 1410 of menu 1110, the user accesses Favorites submenu 1420 on Favorites GUI 1400 which offers several choices concerning the Favorites feature. For example, in this instance the user can choose from: creating (set) a new profile, deleting (clear) an existing profile, adding parameters to an existing profile, finding favorite channels or shows and excluding channels, column 25, line 65 through column 26, line 6).

As to claim 11, McElhatten discloses a display for an Intelligent television TV, comprising a partial-screen display on an in-use display of the Intelligent TV, the partial-screen display comprising a favorite channel portion showing Electronic Programming Guide EPG information for a plurality of favorite tagged channels (A channel may be designated as a "Favorite Channel" by selecting "Favorite Channels" from the Favorites menu 1420 or by pressing FAV key 980 of remote control 900. Once a user has defined one or more Favorite channels, the user can toggle interactive program guide 1020 to display only Favorite channels and re-toggle back to the full list of channels, Figure 24, column 26, line 64 through column 27, line 4) and a favorite show portion showing EPG information for a plurality of favorite tagged shows (Reserve GUI 5520 is displayed, providing the user with two reserve options (5530): (1) reserve the program, and (2) select a season pass. The program reserve option which is highlighted as the default choice enables a user to select a program to be added to a user's Favorite Show list which becomes available for viewing after the program has broadcast. Program guide 5510b is then redisplayed, Figure 23, column 17, lines 3-10).

As to claim 12, McElhatten discloses the EPG display of claim 11, wherein the partial-screen display overlays the in-use display of the Intelligent TV (GUI 1900 comprises window 1903 (overlays) which displays thereon an in-progress HBO program, Figure 31, column 32, lines 42-43).

As to claim 13, McElhatten discloses the EPG display of claim 11, wherein the in-use display comprises a currently playing TV program (GUI 1900 comprises window 1903 which displays thereon an in-progress HBO program (currently playing TV program), Figure 31, column 32, lines 42-43).

As to claim 14, McElhatten discloses the EPG display of claim 11, wherein the partial-screen display resizes the in-use display (GUI 1900 comprises window 1903 (resized into smaller corner window) which displays thereon an in-progress HBO program (currently playing TV program), Figure 31, column 32, lines 42-43).

As to claim 15, McElhatten discloses the EPG display of claim 11, wherein the plurality of favorite tagged shows is a plurality of shows that are currently airing (Users can reserve programs that are currently being broadcast while they are watching the program or from an interactive program guide, Figure 23, column 15, lines 37-42).

As to claim 16, McElhatten discloses the EPG display of claim 11, wherein an EPG display application is configured to generate the partial-screen display (GUI 1900 comprises window 1903 (overlays) which displays thereon an in-progress HBO program, Figure 31, column 32, lines 42-43).

As to claim 17, McElhatten discloses the EPG display of claim 16, wherein the EPG display application is configured to retrieve the EPG information for the plurality of favorite tagged channels and the plurality of favorite tagged shows through an EPG subservice, wherein the EPG subservice is configured to retrieve channels and shows tagged as favorite through a tag subservice (By accessing Home GUI 1030, a user is prompted to select one of the programming features listed in menu 1110. By selecting Favorites feature 1410 of menu 1110, the user accesses Favorites submenu 1420 on Favorites GUI 1400 which offers several choices concerning the Favorites feature. For example, in this instance the user can choose from: creating a new profile, deleting an existing profile, adding parameters to an existing profile, finding favorite channels or shows and excluding channels, Figure 23, column 25, line 64 through column 26, line 6).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55570

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:
-***-Continued from Previous Supplemental Box-***-

As to claim 18, McElhatten discloses the EPG display of claim 17, wherein a second application is configured to set and clear favorite tags for channels and shows through the tag subservice (By selecting Favorites feature 1410 of menu 1110, the user accesses Favorites submenu 1420 on Favorites GUI 1400 which offers several choices concerning the Favorites feature. For example, in this instance the user can choose from: creating (set) a new profile, deleting (clear) an existing profile, adding parameters to an existing profile, finding favorite channels or shows and excluding channels, Figure 23, column 25, line 65 through column 26, line 6).

As to claim 19, McElhatten discloses the EPG display of claim 16, wherein the EPG display application is configured to retrieve and display thumbnails for channels and shows through a thumbnail cache manager, wherein uniform resource identifiers (URIs) for each thumbnail is in the EPG information retrieved through the EPG subservice, and wherein the thumbnail cache manager is configured to serve each thumbnail using the respective URI (Figure 31, What's Hot feature to reserve certain HBO programs (channel) through their promotional previews, the user may select a "What's Hot!" option, denoted 1925. Similar to a What's Hot preview, a thumbnail preview, denoted 1931, may be used to reserve the program (show) e.g., "The Gathering Storm" featured in the preview in advance of the broadcast of the program e.g., on April 27. To make such a reservation, the user may highlight and select preview 1931, Figure 31, column 32, line 63 through column 33, line 5).

As to claim 20, McElhatten discloses a tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed by the microprocessor, perform the steps of claim 1 (processor 109 while processing TV program 201 may locate the corresponding program guide data to create in real time the metadata file associated with TV program 201. The metadata file thus created includes such data as the title, rating, names of the producer, director, and actors, duration of the program, program type, etc, column 7, lines 5-12).

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

Electronic Acknowledgement Receipt

EFS ID:	22308156
Application Number:	13969857
International Application Number:	
Confirmation Number:	3306
Title of Invention:	SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION
First Named Inventor/Applicant Name:	Sanjiv Sirpal
Customer Number:	111285
Filer:	Douglas W. Swartz/Robert Roe-Pachirat
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-427
Receipt Date:	11-MAY-2015
Filing Date:	19-AUG-2013
Time Stamp:	15:08:44
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		6583-427_IDS_05.pdf	665638 4700f99062dea6bf0ce5046efa7e5e126bcfc2e1	yes	12

	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Transmittal Letter		1	3	
	Information Disclosure Statement (IDS) Form (SB08)		4	12	
Warnings:					
Information:					
2	Non Patent Literature	6583-426-PCT_IPRP_02-26-2015.pdf	1106846 860c6777f5abf66438e458d06717e5ffc6800ae9	no	8
Warnings:					
Information:					
3	Non Patent Literature	6583-430-PCT_IPRP_02-26-2015.pdf	1400522 9b1cedd55afe8b295bfcf08b1a1a71f2eef2a1a2	no	8
Warnings:					
Information:					
4	Non Patent Literature	6583-434-PCT_IPRP_02-26-2015.pdf	1446392 244ec09e9440bfd6df3678bfcf64698133f78579	no	10
Warnings:					
Information:					
5	Non Patent Literature	6583-436-PCT_IPRP_02-26-2015.pdf	970373 3ed83dffd1d8d61578a94697d00582b75086de2a	no	8
Warnings:					
Information:					
6	Non Patent Literature	6583-444-PCT_IPRP_02-26-2015.pdf	1207335 04ab0c1afe9a80fa05b930352ba833df0ae10e21	no	8
Warnings:					
Information:					
7	Non Patent Literature	6583-445-PCT_IPRP_02-26-2015.pdf	1659153 5d24a79c7918660773d1aa8954cc96d78f1be6cd	no	10
Warnings:					
Information:					
8	Non Patent Literature	6583-446-PCT_IPRP_02-26-2015.pdf	1181450 f46a38eb1c336d7dbf9a22e91eb18776569c8548	no	8
Warnings:					
Information:					

9	Non Patent Literature	6583-448-PCT_IPRP_02-26-2015.pdf	437806 ab639dc4a8c89a20049b3cf0957a8039ce8af7a4	no	9
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
10	Non Patent Literature	6583-449-PCT_IPRP_02-26-2015.pdf	635812 968fe71ddb391afbfc12578f06b63af1e556a9d1	no	12
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
11	Non Patent Literature	6583-450-PCT_IPRP_02-26-2015.pdf	2111478 f26f7f41c8a089e611f630d1abda958a70a87fc4	no	10
Warnings:					
Information:					
12	Non Patent Literature	6583-452-PCT_IPRP_02-26-2015.pdf	461083 a6d12706f7a3c8a3fd1fea612635486ca1b7bd8f	no	8
Warnings:					
Information:					
13	Non Patent Literature	6583-453-PCT_IPRP_02-26-2015.pdf	2256438 a821841ca2811ad21245b2699fe88efba4589607	no	12
Warnings:					
Information:					
14	Non Patent Literature	6583-454-PCT_IPRP_02-26-2015.pdf	1257213 485d50581636ed0277ec34014f94fa5617037c75	no	8
Warnings:					
Information:					
15	Non Patent Literature	6583-463-PCT_IPRP_02-26-2015.pdf	321196 acf5ff288fc2eb0558a901e3e39d5cf84b5f5cf2	no	6
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
16	Non Patent Literature	6583-464-PCT_IPRP_02-26-2015.pdf	664317 428c425601a897ef770a49863a51479286ab186d	no	10
Warnings:					

Information:					
17	Non Patent Literature	6583-469-PCT_IPRP_02-26-2015.pdf	489684 d77b8c30ba5252b8b1dd8ff21a49d08a430b04ce	no	8
Warnings:					
Information:					
18	Non Patent Literature	6583-470-PCT_IPRP_02-26-2015.pdf	1466713 c5e4829bd5ac8a75ff01dd5706e684a1b8ae78cb	no	8
Warnings:					
Information:					
19	Non Patent Literature	6583-471-PCT_IPRP_02-26-2015.pdf	358641 ed2e3f1532e02a26bbbe2448a423d8ef800aa0c2	no	8
Warnings:					
Information:					
20	Non Patent Literature	6583-472-PCT_IPRP_02-26-2015.pdf	759420 263ad4e8c22582ede4c377f953b78ea558d00e3b	no	12
Warnings:					
Information:					
21	Non Patent Literature	6583-478-PCT_IPRP_02-26-2015.pdf	1351558 be64cf17341289a842d173d6025a22e70a1ffabd	no	8
Warnings:					
Information:					
22	Non Patent Literature	6583-479-PCT_IRPR_02-26-2015.pdf	460578 cae9799e0ea3572ba921e1fa73495b61cdf8c9e4	no	8
Warnings:					
Information:					
23	Non Patent Literature	6583-481-PCT_IPRP_02-26-2015.pdf	433142 67a0161205170efddbd065657df5951fa98001b3	no	8
Warnings:					
Information:					
24	Non Patent Literature	6583-487-PCT_IPRP_02-26-2015.pdf	802359 f8c63a01ce0cf3a93e5f187710d6561e5e73fdad	no	6
Warnings:					
Information:					
25	Non Patent Literature	6583-488-PCT_IPRP_02-26-2015.pdf	353265 5be20da6790fa9be0964a6111786b5fcf7ae33ac	no	7
Warnings:					

Information:					
26	Non Patent Literature	6583-490-PCT_IPRP_04-02-2015.pdf	313553 758c1d2df25582420c17623d82ab25bcbf3fd8b	no	8
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
27	Non Patent Literature	6583-491-PCT_IPRP_04-02-2015.pdf	330762 5d0a7b5c29d49285a3f9afa93de8d828542437e9	no	7
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
28	Non Patent Literature	6583-494-PCT_IPRP_04-02-2015.pdf	516227 8b838d10d7454d513de8417ae8e533cb4750a45c	no	9
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
29	Non Patent Literature	6583-495-PCT_IPRP_04-02-2015.pdf	325705 a8e571e6fd86d22570ae519c55764776826111fd	no	6
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
30	Non Patent Literature	6583-496-PCT_IPRP_04-02-2015.pdf	294925 4bd0793a2ab1424030f778fbe8450dd446689ae1	no	6
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
31	Non Patent Literature	6583-497-PCT_IPRP_04-02-2015.pdf	401098 22f87db60001f32ed7ec07646b42917c5c375cc6	no	8
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
32	Non Patent Literature	6583-498-PCT_IPRP_04-02-2015.pdf	383492 307a12a33e19cb866dc7ae2303185fcf16b9	no	7

Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
33	Non Patent Literature	6583-509-PCT_IPRP_02-26-2015.pdf	443933 0e9d008fea20877f00c2938cd57fc26e5616a442	no	7
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
34	Non Patent Literature	6583-519-PCT_IPRP_02-26-2015.pdf	452319 e4a3a426ae7cd4a31f7d7e46433784739 73fa957	no	9
Warnings:					
Information:					
35	Non Patent Literature	6583-520-PCT_IPRP_02-26-2015.pdf	341098 8e86f0003f48733e290993a76bdc010b754f72c9	no	7
Warnings:					
Information:					
36	Non Patent Literature	6583-426_FOA_03-02-2015.pdf	2185783 7550d9c9d8dd5e997d58f600bcf28ad652bc44d7	no	21
Warnings:					
Information:					
37	Non Patent Literature	6583-428_FOA_02-24-2015.pdf	1973016 cda4a93695e1933ca71f02a15fd18a0957cfd438	no	22
Warnings:					
Information:					
38	Non Patent Literature	6583-431_FOA_03-27-2015.pdf	1252501 a522de4a76671c93fc9bd3eec9d2c3952f80da2a	no	14
Warnings:					
Information:					
39	Non Patent Literature	6583-432_NOA_03-24-2015.pdf	1697374 79ab08c8615570ecfcab6f68e4badddbc269651c	no	16
Warnings:					
Information:					
40	Non Patent Literature	6583-433_FOA_03-11-2015.pdf	2106444 0fe31424aaaf84baa0c7d273f657e5fb6a0fefc6	no	24
Warnings:					

Information:					
41	Non Patent Literature	6583-434_FOA_04-03-2015.pdf	1784178 2a3b995a85d218e81ca2e8cf745a166152136b19	no	19
Warnings:					
Information:					
42	Non Patent Literature	6583-435_FOA_03-11-2015.pdf	1771359 d2afb94d82eab9e0e100254a35bad90f65afa9de	no	19
Warnings:					
Information:					
43	Non Patent Literature	6583-436_OA_01-22-2015.pdf	366463 be12d9ed7e8a090bc69ece8280741a4de277d466	no	12
Warnings:					
Information:					
44	Non Patent Literature	6583-437_NOA_02-02-2015.pdf	667980 ca471ee7063cac8d89601eda483df83478bcb12f	no	14
Warnings:					
Information:					
45	Non Patent Literature	6583-438_OA_02-11-2015.pdf	1087475 42bedd02805cdbcebb452c98f48be064c09962e6	no	25
Warnings:					
Information:					
46	Non Patent Literature	6583-439_OA_02-10-2015.pdf	384604 6c1806f65d3b47b5eeecde692cccf71b751f5c31	no	13
Warnings:					
Information:					
47	Non Patent Literature	6583-441_OA_02-26-2015.pdf	904822 432aeddf15ef8f6683774afabbe8206f259f6b75	no	10
Warnings:					
Information:					
48	Non Patent Literature	6583-442_OA_11-19-2014.pdf	348816 3667611b165b16ab284bdd46d0cb8d807ef5a95a	no	12
Warnings:					
Information:					
49	Non Patent Literature	6583-443_NOA_12-09-2014.pdf	558249 c53f7b2c0bf3d1c52093bd74b0676c1718af1bee	no	11
Warnings:					

Information:					
50	Non Patent Literature	6583-444_OA_01-23-2015.pdf	309797 f0124fdd0538e61eef42c0417d286735a51c1a97	no	9
Warnings:					
Information:					
51	Non Patent Literature	6583-445_NOA_01-05-2015.pdf	961457 f3eb5c2891bf96bfe8e5211faabf3b73bcd6df5f	no	20
Warnings:					
Information:					
52	Non Patent Literature	6583-445_Corrected_NOA_04-01-2015.pdf	623795 78f6b05b0a3e85dc1183690ce547ff10f9066b4f	no	15
Warnings:					
Information:					
53	Non Patent Literature	6583-446_OA_12-26-2014.pdf	429445 fc3a5349b4994bf651f6e07efa150593abff20b6	no	13
Warnings:					
Information:					
54	Non Patent Literature	6583-447_OA_01-27-2015.pdf	593977 da83095662f9be31c05010958901aa352ff0ac93	no	17
Warnings:					
Information:					
55	Non Patent Literature	6583-448_OA_04-01-2015.pdf	1468470 fa8f6856a03ab48e3d747c8a344020dbecda5f80	no	16
Warnings:					
Information:					
56	Non Patent Literature	6583-449_OA_11-26-2014.pdf	595761 5d4122672f5f6fd649840dd4dcf4226aae5b1dfd	no	17
Warnings:					
Information:					
57	Non Patent Literature	6583-449_OA_03-12-2015.pdf	1966365 03f11a3bf4809b69b36963a68192ab2f697c8719	no	21
Warnings:					
Information:					
58	Non Patent Literature	6583-450_OA_11-24-2014.pdf	403057 a916edfe32e145f1b79749dc6207d2645b324c54	no	13
Warnings:					

Information:					
59	Non Patent Literature	6583-450_OA_03-11-2015.pdf	1117465 73c1fd4b49843749e7be070c77a5d0a5bc5a50f4	no	13
Warnings:					
Information:					
			Total Files Size (in bytes):	53620177	

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	)	Group Art Unit: 2425
Sanjiv Sirpal	)	Confirmation No.: 3306
Serial No.: 13/969,857	)	Examiner: Kieu Oanh T Bui
Filed: August 19, 2013	)	SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
Atty. File No.: 6583-427	)	
Entitled: "Systems and Methods for Providing User Interfaces in an Intelligent Television"	)	*Electronically Submitted*

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

Dear Commissioner:

The references cited on attached Form PTO/SB08 are being called to the attention of the Examiner.

☒ Copies of the cited non-patent and/or foreign references are enclosed herewith.

☐ Copies of the cited U.S. patents and/or patent applications are enclosed herewith.

☒ Copies of the cited U.S. patents/unpublished patent applications/patent application publications are not enclosed in accordance with 37 C.F.R. § 1.98(a).

☐ Copies of the cited references are not enclosed, in accordance with 37 C.F.R. § 1.98(d), because the references were cited by or submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____ filed _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

☐ To the best of applicants' belief, the pertinence of the foreign-language references is believed to be summarized in the attached English abstracts and/or in the figures, although applicants do not necessarily vouch for the accuracy of the translation.

☒ Examiner's attention is drawn to the following related applications:

- Serial No. 14/407,598 filed 12/12/2014 (Attorney's Ref. No. 6583-424-PUS)
- Serial No. 14/418,969 filed 02/02/2015 (Attorney's Ref. No. 6583-430-PUS)
- Serial No. 14/407,593 filed 12/12/2014 (Attorney's Ref. No. 6583-470-PUS)
- Serial No. 14/407,601 filed 12/12/2014 (Attorney's Ref. No. 6583-471-PUS)
- Serial No. 14/407,609 filed 12/12/2014 (Attorney's Ref. No. 6583-472-PUS)
- Serial No. 14/418,972 filed 02/02/2015 (Attorney's Ref. No. 6583-487-PUS)
- Serial No. 14/418,971 filed 02/02/2015 (Attorney's Ref. No. 6583-507-PUS)

VIZIO Ex. 1002, Page 3487 of 3573
VIZIO v. MMT, IPR2024-00722

☐ Other:_____

Submission of the above information is not intended as an admission that any item is citable under the statutes or rules to support a rejection, that any item disclosed represents analogous art, or that those skilled in the art would refer to or recognize the pertinence of any reference without the benefit of hindsight, nor should an inference be drawn as to the pertinence of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

FEES

☒	**37 CFR 1.97(b)**: No fee is believed due in connection with this submission, because the information disclosure statement submitted herewith is satisfied by one of the following conditions ("X" indicates satisfaction): ☐ Within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d), or ☐ Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application, or ☒ Before the mailing date of a first Office Action on the merits, or ☐ Before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114. Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.
☐	**37 CFR 1.97(c)**: The information disclosure statement transmitted herewith is being filed after all the above conditions (37 CFR 1.97(b)), but before the mailing date of any one of the following conditions: (1) a final action under 37 C.F.R. 1.113, or (2) a notice of allowance under 37 C.F.R. 1.311, or (3) an action that otherwise closes prosecution in the application. This Information Disclosure Statement is accompanied by: ☐ A Certification (below) as specified by 37 C.F.R. 1.97(e). Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970. OR ☐ Please charge Deposit Account 19-1970 in the amount of $180.00 for the fee set forth in 37 C.F.R. 1.17(p) for submission of an information disclosure statement. Please credit any overpayment or charge any underpayment to Deposit Account 19-1970.
☐	**37 CFR 1.97(d)**: This Information Disclosure Statement is being submitted after the period specified in 37 CFR 1.97(c). ☐ This information Disclosure Statement includes a Certification (below) as specified by 37 C.F.R. 1.97(e) AND ☐ Applicants hereby requests consideration of the reference(s) disclosed herein. Please charge Deposit Account 19-1970 in the amount of $180.00 under 37 C.F.R. 1.17(p). Please credit any overpayment or charge any underpayment to Deposit Account 19-1970. Election to pay the fee should not be taken as an indication that applicant(s) cannot execute a certification.

VIZIO Ex. 1002, Page 3488 of 3573
VIZIO v. MMT, IPR2024-00722

Certification (37 C.F.R. 1.97(e))
(Applicable only if checked)

☐ The undersigned certifies that:

☐ Each item of information contained in the Information Disclosure Statement submitted herewith 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 this statement. 37 C.F.R. 1.97(e)(1).

☐ A copy of the communication from the foreign patent office is enclosed.

OR

☐ No item of information contained in the Information Disclosure Statement submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(2).

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: May 11, 2015

VIZIO Ex. 1002, Page 3489 of 3573
VIZIO v. MMT, IPR2024-00722

Electronic Acknowledgement Receipt

EFS ID:	22308602
Application Number:	13969857
International Application Number:	
Confirmation Number:	3306
Title of Invention:	SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION
First Named Inventor/Applicant Name:	Sanjiv Sirpal
Customer Number:	111285
Filer:	Douglas W. Swartz/Robert Roe-Pachirat
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-427
Receipt Date:	11-MAY-2015
Filing Date:	19-AUG-2013
Time Stamp:	15:22:21
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	Non Patent Literature	6583-451_OA_04-29-2015.pdf	1045521 9ddb5ef9a40e588607e6174cb3b6d4eb104d33a5	no	12

Warnings:	
Information:	

2	Non Patent Literature	6583-452_FOA_03-11-2015.pdf	1084910 aafd934b38b3dcd11f3dd48199a08b2fb7dbd5f1	no	12
Warnings:					
Information:					
3	Non Patent Literature	6583-453_OA_12-24-2014.pdf	430655 cd6b391443446b38c29d8c90ebdbdee3bcc2a6ca	no	13
Warnings:					
Information:					
4	Non Patent Literature	6583-453_NOA_04-14-2015.pdf	1105235 191a3132f3337637f38d24c3591ae391be931dca	no	9
Warnings:					
Information:					
5	Non Patent Literature	6583-454_OA_02-24-2015.pdf	823247 4b488fd5ecdbd70e2ad207254d4e31b72b8ed378	no	9
Warnings:					
Information:					
6	Non Patent Literature	6583-456_OA_11-19-2014.pdf	745324 445808b31c550fbd70bfb4d50ad1d4230c939012	no	22
Warnings:					
Information:					
7	Non Patent Literature	6583-456_OA_03-13-2015.pdf	2433380 a1860f8a0e22b7c1b3afd238e83c59b36e391a76	no	26
Warnings:					
Information:					
8	Non Patent Literature	6583-457_FOA_03-20-2015.pdf	2434822 89e5834056e9ba7de26fb75c62a397e8564cb3d7	no	25
Warnings:					
Information:					
9	Non Patent Literature	6583-458_OA_12-05-2014.pdf	469764 80167d3b262c26f5ebbd7a0550d52437a2944e65	no	14
Warnings:					
Information:					
10	Non Patent Literature	6583-459_OA_03-02-2015.pdf	1370385 d79e419a9f911c825d24223cd8727cc84f488f70	no	15
Warnings:					
Information:					

11	Non Patent Literature	6583-463_OA_11-14-2014.pdf	408839 627729eccc56991e615bbd430b6df9fcd0d23d9e	no	14
Warnings:					
Information:					
12	Non Patent Literature	6583-463_OA_03-05-2015.pdf	1253968 f41800b78cfa7577f3e9d3e97c890a060ecead36e	no	16
Warnings:					
Information:					
13	Non Patent Literature	6583-464_OA_12-19-2014.pdf	318250 b4879ae3d5e1956ff6f743818cd2c1abf22a91c2	no	9
Warnings:					
Information:					
14	Non Patent Literature	6583-469_OA_01-29-2015.pdf	553032 16fad9dc6dc6982110a70bdcec6ac655ad1c17fd	no	17
Warnings:					
Information:					
15	Non Patent Literature	6583-478_OA_11-28-2014.pdf	466455 4f2b564dc0233b4c3c2579ed9b97ed1bac6a0980	no	15
Warnings:					
Information:					
16	Non Patent Literature	6583-478_OA_03-12-2015.pdf	541708 b1589d4e6cd911f43c0de9692f1219cf46af5cda	no	17
Warnings:					
Information:					
17	Non Patent Literature	6583-479_OA_01-22-2015.pdf	472942 8bab654069c9f8aed55718e76a8228f65f08afc1	no	15
Warnings:					
Information:					
18	Non Patent Literature	6583-480_OA_01-23-2015.pdf	264694 e40f1a5c37ba865b3bbd6674b9ca868217553a34	no	9
Warnings:					
Information:					
19	Non Patent Literature	6583-481_OA_12-09-2014.pdf	333395 02c166f1174c445f03b13f7cd3c836154b050806	no	9
Warnings:					
Information:					

20	Non Patent Literature	6583-489_OA_01-28-2015.pdf	678844 6fefdb469270754096f3ad8ea22ae7205d6f1b42	no	18
Warnings:					
Information:					
21	Non Patent Literature	6583-491_OA_12-05-2014.pdf	841522 bcc94ca64875083e685dc0a600fbbf1f046cc765	no	25
Warnings:					
Information:					
22	Non Patent Literature	6583-491_FOA_04-17-2015.pdf	1470842 5d5d991e6c1d769550fc7a939e84ccbb2bd51c9b	no	17
Warnings:					
Information:					
23	Non Patent Literature	6583-493_OA_11-14-2014.pdf	553523 7977a85bdde4e28a01320e900ae1821f5524bf3b	no	17
Warnings:					
Information:					
24	Non Patent Literature	6583-493_FOA_02-23-2015.pdf	1078207 6f81907f7bf1aed54ab21f3e4c22880f312b22ea	no	13
Warnings:					
Information:					
25	Non Patent Literature	6583-495_OA_01-05-2015.pdf	407920 b4a6982a37e6c02a8a2866e0f2a67df5eb2c3f64	no	13
Warnings:					
Information:					
26	Non Patent Literature	6583-496_OA_12-26-2014.pdf	370706 d1f715aba1ddaf7b8291de3e2880f638a47caa16	no	13
Warnings:					
Information:					
27	Non Patent Literature	6583-498_NOA_01-06-2015.pdf	388054 2e209c7e2dfc6784e332feb1e67ec9e646659ed7	no	6
Warnings:					
Information:					
28	Non Patent Literature	6583-499_OA_12-31-2014.pdf	240315 9eabe1fe61ce12be21b240c49bc33ac712afa7c8	no	7
Warnings:					
Information:					

29	Non Patent Literature	6583-499_NOA_02-24-2015.pdf	804296 b689bf6c2d6c74fb35cb832dcad1017df28db749	no	5
Warnings:					
Information:					
30	Non Patent Literature	6583-500_OA_12-26-2014.pdf	455305 21a2589b248f26227b8971580dd8f1a97288e50e	no	13
Warnings:					
Information:					
31	Non Patent Literature	6583-501_OA_01-08-2015.pdf	344817 47f482c4abda6303f2f97ddc706f77d2c2b5cf8b	no	11
Warnings:					
Information:					
32	Non Patent Literature	6583-501_OA_04-15-2015.pdf	956314 5283dc954b8114ab31cfda343103e31fdb149d76	no	11
Warnings:					
Information:					
33	Non Patent Literature	6583-504_OA_11-19-2014.pdf	341961 553f19f651eaf8bb0868db8fd5491c7e766ce0a8	no	11
Warnings:					
Information:					
34	Non Patent Literature	6583-504_OA_03-27-2015.pdf	1318871 2943fcc5695291b81bf48e0246512fdffb166b55	no	15
Warnings:					
Information:					
35	Non Patent Literature	6583-508_OA_01-27-2015.pdf	998600 91efbdf861c3a3d8f510b8bc2a63ab1950fbd8b9	no	30
Warnings:					
Information:					
36	Non Patent Literature	6583-509_OA_12-18-2014.pdf	278543 8d3d82a48ea1ab6a0a3af9dabc5453954f17cca6	no	9
Warnings:					
Information:					
37	Non Patent Literature	6583-509_FOA_04-07-2015.pdf	836883 2546f1a55f839136bfbd7f95bac6d951d343c420	no	10
Warnings:					
Information:					

38	Non Patent Literature	6583-510_OA_03-05-2015.pdf	289931 45423a205ff1c3a68330a88f9cdd48236f7b1019	no	9
Warnings:					
Information:					
39	Non Patent Literature	6583-511_FOA_02-24-2015.pdf	1340921 7bf39ba6ccd1d41bae74d6a3646ebbca586ce876	no	17
Warnings:					
Information:					
40	Non Patent Literature	6583-519_OA_01-22-2015.pdf	450059 0a4b44019ccad70bfa32bb7424c023c5a9da3142	no	14
Warnings:					
Information:					
41	Non Patent Literature	6583-520_OA_12-22-2014.pdf	648286 24be919f25401089f54a4ca207c249bb6bfa189a	no	20
Warnings:					
Information:					
42	Non Patent Literature	6583-526_FOA_02-23-2015.pdf	911137 310a03429b6b48080ae910d947cc851b57ccffb0	no	10
Warnings:					
Information:					
		Total Files Size (in bytes):	32562383		

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 08/21/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
BUI, KIEU OANH T

ART UNIT	PAPER NUMBER
2425	

DATE MAILED: 08/21/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/969,857	08/19/2013	Sanjiv Sirpal	6583-427	3306

TITLE OF INVENTION: SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	11/23/2015

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 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity 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 and an extra copy of the form should be submitted. 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: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (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 including the Patent, advance orders and notification of maintenance fees 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.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 08/21/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

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 facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/969,857	08/19/2013	Sanjiv Sirpal	6583-427	3306

TITLE OF INVENTION: SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	11/23/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
BUI, KIEU OANH T	2425	725-037000

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/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form 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 has been filed for recordation as set forth in 37 CFR 3.11. 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. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

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 (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

VIZIO Ex. 1002, Page 3497 of 3573
VIZIO v. MMT, IPR2024-00722

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.
13/969,857	08/19/2013	Sanjiv Sirpal	6583-427	3306

111285 7590 08/21/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
BUI, KIEU OANH T	

ART UNIT	PAPER NUMBER
2425	

DATE MAILED: 08/21/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

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.

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 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, 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. 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.

Notice of Allowability	Application No. 13/969,857	Applicant(s) SIRPAL, SANJIV	
	Examiner KIEU OANH T. BUI	Art Unit 2425	AIA (First Inventor to File) Status Yes

-- 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 *pre-amendment on 11/06/2013*.
   ☐ 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 *3,4 and 15-32*. 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 _____.

/KIEU OANH T BUI/
Primary Examiner
Art Unit: 2425

DETAILED ACTION

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Remark

2. Claims 1-2 and 5-14 were cancelled, and new claims 15-32 are added. Claims 3-4 and 15-32 are pending for examination.

Allowable Subject Matter

3. Claims 3-4 and 15-32 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Regarding claim 3, the prior art of record fails to teach or suggest each and every feature of the present invention for "a method for providing a user interface in an intelligent television, the method comprising:

receiving, by a processor of the intelligent television, a selection associated with a first navigation bar in the user interface of the intelligent television;

determining if a second user interface, associated with the selection, can contain a second navigation bar;

if a second user interface, associated with the selection, can contain a second navigation bar, rendering a horizontal navigation bar as the second navigation bar in the second user interface; and

if a second user interface, associated with the selection, can not contain a second navigation bar, rendering a different user interface device for the second navigation bar in the second user interface" as claimed, and as claimed in claims 4 and 28.

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

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to PTO New Central Fax number:

(571) 273-8300, (for Technology Center 2400 only)

Hand deliveries must be made to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIEU OANH BUI whose telephone number is (571)272-7291. The examiner can normally be reached on MON - FRI from 8:30 AM -6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BRIAN PENDLETON can be reached on (571) 272-7527. 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.

/KIEU-OANH BUI/
Primary Examiner, Art Unit 2425
July 20, 2015

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	1	of	9	Attorney Docket Number	6583-427

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	5701183	12/23/1997	Bellemare et al.	
	2	5734444	03/31/1998	Yoshinobo	
	3	5801747	09/01/1998	Bedard	
	4	5933141	08/03/1999	Smith	
	5	6285804	09/04/2001	Crinon et al.	
	6	6493876	12/10/2002	DeFreese et al.	
	7	6515968	02/04/2003	Combar et al.	
	8	7058600	06/06/2006	Combar et al.	
	9	7232073	06/19/2007	de Jong	
	10	8352983	01/08/2013	Chane et al.	
	11	8549561	10/01/2013	Yeh et al.	
	12	8566874	10/22/2013	Roberts et al.	
	13	8589981	11/19/2013	Lee et al.	
	14	8832742	09/09/2014	Rasanen et al.	
	15	8875056	10/28/2014	Onogi et al.	
	16	2002/0007485	01/17/2002	Rodriguez et al.	
	17	2002/0026637	02/28/2002	Markel et al.	
	18	2002/0042914	04/11/2002	Walker et al.	
	19	2002/0052746	05/02/2002	Handelman	
	20	2002/0188958	12/12/2002	Miller	
	21	2003/0014752	01/16/2003	Zaslavsky et al.	
	22	2003/0070171	04/10/2003	Jeon et al.	
	23	2003/0149988	08/07/2003	Ellis et al.	
	24	2003/0221192	11/27/2003	Rappaport et al.	
	25	2004/0078807	04/22/2004	Fries et al.	
	26	2004/0154040	08/05/2004	Ellis	
	27	2005/0097606	05/05/2005	Scott, III et al.	
	28	2005/0097622	05/05/2005	Zigmond et al.	
	29	2005/0120306	06/02/2005	Klassen et al.	
	30	2005/0204382	09/15/2005	Ellis et al.	
	31	2005/0204387	09/15/2005	Knudson et al.	
	32	2005/0229210	10/13/2005	Akhavan	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	2	of	9	Attorney Docket Number	6583-427

	33	2005/0273819	12/08/2005	Knudson et al.	
	34	2006/0117343	06/01/2006	Novak et al.	
	35	2006/0123445	06/08/2006	Sullivan et al.	
	36	2007/0066283	03/22/2007	Haar et al.	
	37	2007/0162936	07/12/2007	Stallings et al.	
	38	2008/0155613	06/26/2008	Benya et al.	
	39	2008/0250455	10/09/2008	Fukuda et al.	
	40	2008/0271080	10/30/2008	Gossweiler et al.	
	41	2008/0313677	12/18/2008	Lee	
	42	2009/0102966	04/23/2009	Jiang et al.	
	43	2009/0125940	05/14/2009	Kim et al.	
	44	2009/0165045	06/25/2009	Stallings et al.	
	45	2009/0199241	08/06/2009	Unger et al.	
	46	2009/0313232	12/17/2009	Tinsley et al.	
	47	2010/0058231	03/04/2010	Duarte et al.	
	48	2010/0060799	03/11/2010	Ishii	
	49	2010/0095317	04/15/2010	Toebes et al.	
	50	2010/0128183	05/27/2010	Ishii	
	51	2010/0191727	07/29/2010	Malik	
	52	2010/0235740	09/16/2010	Friedlander et al.	
	53	2010/0302444	12/02/2010	Ahn et al.	
	54	2010/0306800	12/02/2010	Jung et al.	
	55	2010/0319036	12/16/2010	Lim et al.	
	56	2010/0321405	12/23/2010	MacInnes et al.	
	57	2011/0043696	02/24/2011	Onogi et al.	
	58	2011/0119707	05/19/2011	Bae et al.	
	59	2011/0213670	09/01/2011	Strutton et al.	
	60	2011/0283318	11/17/2011	Seidel et al.	
	61	2011/0283304	11/17/2011	Roberts et al.	
	62	2012/0026400	02/02/2012	Kang et al.	
	63	2012/0054803	03/01/2012	Lee et al.	
	64	2012/0060187	03/08/2012	Moon et al.	
	65	2012/0079427	03/29/2012	Carmichael et al.	
	66	2012/0133840	05/31/2012	Shirasuka et al.	
	67	2012/0143972	06/07/2012	Malik et al.	
	68	2012/0167154	06/28/2012	Kim et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
(Use as many sheets as necessary)				First Named Inventor	Sanjiv Sirpal
				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	3	of	9	Attorney Docket Number	6583-427

	69	2012/0194742	08/02/2012	Barnes et al.	
	70	2012/0198490	08/02/2012	Mertens	
	71	2012/0210367	08/16/2012	Lee et al.	
	72	2012/0272271	10/25/2012	Nishizawa et al.	
	73	2012/0278725	11/01/2012	Gordon et al.	
	74	2012/0284751	11/08/2012	Kim et al.	
	75	2012/0297422	11/22/2012	Mountain	
	76	2013/0027613	01/31/2013	Kim et al.	
	77	2013/0034023	02/07/2013	Jung	
	78	2013/0047174	02/21/2013	Lee et al.	
	79	2013/0051615	02/28/2013	Lim et al.	
	80	2013/0091053	04/11/2013	Park et al.	
	81	2013/0148023	06/13/2013	Sullivan et al.	
	82	2013/0152135	06/13/2013	Hong et al.	
	83	2013/0263021	10/03/2013	Dunn et al.	
	84	2013/0263053	10/03/2013	Tritschler et al.	
	85	2013/0276031	10/17/2013	Oh et al.	
	86	2013/0297697	11/07/2013	Haimovitch et al.	
	87	2013/0298164	11/07/2013	Moreau et al.	
	88	2014/0040344	02/06/2014	Gehring et al.	
	89	2014/0068679	03/06/2014	Kaneko et al.	
	90	2014/0082659	03/20/2014	Fife et al.	
	91	2014/0181851	06/26/2014	Givon et al.	
	92	2014/0181853	06/26/2014	Dureau et al.	
	93	2014/0188970	07/03/2014	Madhok et al.	
	94	2014/0223464	08/07/2014	Moran et al.	
	95	2014/0259074	09/11/2014	Ansari et al.	
	96	2014/0380414	12/25/2014	Saidi et al.	

UNPUBLISHED U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Filing Date MM-DD-YYYY	Name of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	97	14/407593	12/12/2014	Sirpal et al.	
	98	14/407598	12/12/2014	Sirpal et al.	
	99	14/407601	12/12/2014	Sirpal et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

VIZIO Ex. 1002, Page 3506 of 3573
VIZIO v. MMT, IPR2024-00722

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	4	of	9	Attorney Docket Number	6583-427

	100	14/407609	12/12/2014	Sirpal et al.	
	101	14/418969	02/02/2015	Sirpal et al.	
	102	14/418972	02/02/2015	Sirpal et al.	
	103	14/418971	02/02/2015	Shoykher et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]; Number[4]; Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

NON-PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.
	104	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55494, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-426-PCT) 8 pages
	105	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/36826, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-430-PCT) 8 pages
	106	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055342, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-434-PCT) 10 pages
	107	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55589, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-436-PCT) 8 pages
	108	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055289, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-444-PCT) 8 pages
	109	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055288, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-445-PCT) 10 pages
	110	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055286, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-446-PCT) 8 pages
	111	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055284, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-448-PCT) 9 pages
	112	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055293, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-449-PCT) 12 pages
	113	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055294, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-450-PCT) 10 pages
	114	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55493, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-452-PCT) 8 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	5	of	9	Attorney Docket Number	6583-427

	115	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/036828, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-453-PCT) 12 pages
	116	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055340, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-454-PCT) 8 pages
	117	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055551, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-463-PCT) 6 pages
	118	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55592, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-464-PCT) 10 pages
	119	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/036819, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-469-PCT) 8 pages
	120	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/036782, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-470-PCT) 8 pages
	121	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/36678, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-471-PCT) 8 pages
	122	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/036804, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-472-PCT) 12 pages
	123	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55405, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-478-PCT) 8 pages
	124	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055278, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-479-PCT) 8 pages
	125	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55509, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-481-PCT) 8 pages
	126	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/CN2013/081639, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-487-PCT) 6 pages
	127	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055303, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-488-PCT) 7 pages
	128	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055383, mailed Apr. 02, 2015 (Attorney's Ref. No. 6583-490-PCT) 8 pages
	129	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055344, mailed Apr. 02, 2015 (Attorney's Ref. No. 6583-491-PCT) 7 pages
	130	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055389, mailed Apr. 02, 2015 (Attorney's Ref. No. 6583-494-PCT) 9 pages
	131	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055283, mailed Apr. 02, 2015 (Attorney's Ref. No. 6583-495-PCT) 6 pages
	132	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055564, mailed Apr. 02, 2015 (Attorney's Ref. No. 6583-496-PCT) 6 pages
	133	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055379, mailed Apr. 02, 2015 (Attorney's Ref. No. 6583-497-PCT) 8 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	6	of	9	Attorney Docket Number	6583-427

	134	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055349, mailed Apr. 02, 2015 (Attorney's Ref. No. 6583-498-PCT) 7 pages
	135	International Preliminary Report for International (PCT) Patent Application No. PCT/US2013/055298, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-509-PCT) 7 pages
	136	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55567, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-519-PCT) 9 pages
	137	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55570, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-520-PCT) 7 pages
	138	Official Action for U.S. Patent Application No. 13/969,846, mailed Mar. 02, 2015 (Attorney's Ref. No. 6583-426) 21 pages
	139	Official Action for U.S. Patent Application No. 13/969,869, mailed Feb. 24, 2015 (Attorney's Ref. No. 6583-428) 22 pages
	140	Official Action for U.S. Patent Application No. 13/969,880, mailed Mar. 27, 2015 (Attorney's Ref. No. 6583-431) 14 pages
	141	Notice of Allowance for U.S. Patent Application No. 13/969,884, mailed Mar. 24, 2015 (Attorney's Ref. No. 6583-432) 16 pages
	142	Official Action for U.S. Patent Application No. 13/969,887, mailed Mar. 11, 2015 (Attorney's Ref. No. 6583-433) 24 pages
	143	Official Action for U.S. Patent Application No. 13/969,482, mailed Apr. 03, 2015 (Attorney's Ref. No. 6583-434) 19 pages
	144	Official Action for U.S. Patent Application No. 13/969,485, mailed Mar. 11, 2015 (Attorney's Ref. No. 6583-435) 19 pages
	145	Official Action for U.S. Patent Application No. 13/970,388, mailed Jan. 22, 2015 (Attorney's Ref. No. 6583-436) 12 pages
	146	Notice of Allowance for U.S. Patent Application No. 13/970,398, mailed Feb. 02, 2015 (Attorney's Ref. No. 6583-437) 14 pages
	147	Official Action for U.S. Patent Application No. 13/970,409, mailed Feb. 11, 2015 (Attorney's Ref. No. 6583-438) 25 pages
	148	Official Action for U.S. Patent Application No. 13/970,420, mailed Feb. 10, 2015 (Attorney's Ref. No. 6583-439) 13 pages
	149	Official Action for U.S. Patent Application No. 13/970,442, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-441) 10 pages
	150	Official Action for U.S. Patent Application No. 13/970,450, mailed Nov. 19, 2014 (Attorney's Ref. No. 6583-442) 12 pages
	151	Notice of Allowance for U.S. Patent Application No. 13/970,453, mailed Dec. 09, 2014 (Attorney's Ref. No. 6583-443) 11 pages
	152	Official Action for U.S. Patent Application No. 13/968,858, mailed Jan. 23, 2015 (Attorney's Ref. No. 6583-444) 9 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	7	of	9	Attorney Docket Number	6583-427

	153	Notice of Allowance for U.S. Patent Application No. 13/968,884, mailed Jan. 05, 2015 (Attorney's Ref. No. 6583-445) 20 pages
	154	Corrected Notice of Allowance for U.S. Patent Application No. 13/968,884, mailed Apr. 01, 2015 (Attorney's Ref. No. 6583-445) 15 pages
	155	Official Action for U.S. Patent Application No. 13/968,876, mailed Dec. 26, 2014 (Attorney's Ref. No. 6583-446) 13 pages
	156	Official Action for U.S. Patent Application No. 13/968,867, mailed Jan. 27, 2015 (Attorney's Ref. No. 6583-447) 17 pages
	157	Official Action for U.S. Patent Application No. 13/968,913, mailed Apr. 01, 2015 (Attorney's Ref. No. 6583-448) 16 pages
	158	Official Action for U.S. Patent Application No. 13/968,983, mailed Nov. 26, 2014 (Attorney's Ref. No. 6583-449) 17 pages
	159	Official Action for U.S. Patent Application No. 13/968,983, mailed Mar. 12, 2015(Attorney's Ref. No. 6583-449) 21 pages
	160	Official Action for U.S. Patent Application No. 13/968,948, mailed Nov. 24, 2014 (Attorney's Ref. No. 6583-450) 13 pages
	161	Official Action for U.S. Patent Application No. 13/968,948, mailed Mar. 11, 2015 (Attorney's Ref. No. 6583-450) 13 pages
	162	Official Action for U.S. Patent Application No. 13/968,929, mailed Apr. 29, 2015 (Attorney's Ref. No. 6583-451) 12 pages
	163	Official Action for U.S. Patent Application No. 13/969,588, mailed Mar. 11, 2015 (Attorney's Ref. No. 6583-452) 12 pages
	164	Official Action for U.S. Patent Application No. 13/864,120, mailed Dec. 24, 2014 (Attorney's Ref. No. 6583-453) 13 pages
	165	Notice of Allowance for U.S. Patent Application No. 13/864,120, mailed Apr. 14, 2015 (Attorney's Ref. No. 6583-453) 9 pages
	166	Official Action for U.S. Patent Application No. 13/969,505, mailed Feb. 24, 2015 (Attorney's Ref. No. 6583-454) 9 pages
	167	Official Action for U.S. Patent Application No. 13/969,490, mailed Nov. 19, 2014 (Attorney's Ref. No. 6583-456) 22 pages
	168	Official Action for U.S. Patent Application No. 13/969,490, mailed Mar. 13, 2015 (Attorney's Ref. No. 6583-456) 26 pages
	169	Official Action for U.S. Patent Application No. 13/969,491, mailed Mar. 20, 2015 (Attorney's Ref. No. 6583-457) 25 pages
	170	Official Action for U.S. Patent Application No. 13/969,492, mailed Dec. 05, 2014 (Attorney's Ref. No. 6583-458) 14 pages
	171	Official Action for U.S. Patent Application No. 13/969,493, mailed Mar. 2, 2015 (Attorney's Ref. No. 6583-459) 15 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	8	of	9	Attorney Docket Number	6583-427

	172	Official Action for U.S. Patent Application No. 13/970,000, mailed Nov. 14, 2014 (Attorney's Ref. No. 6583-463) 14 pages
	173	Official Action for U.S. Patent Application No. 13/970,000, mailed Mar. 05, 2015 (Attorney's Ref. No. 6583-463) 16 pages
	174	Official Action for U.S. Patent Application No. 13/970,355, mailed Dec. 19, 2014 (Attorney's Ref. No. 6583-464) 9 pages
	175	Official Action for U.S. Patent Application No. 13/864,214, mailed Jan. 29, 2015 (Attorney's Ref. No. 6583-469) 17 pages
	176	Official Action for U.S. Patent Application No. 13/969,179, mailed Nov. 28, 2014 (Attorney's Ref. No. 6583-478) 15 pages
	177	Official Action for U.S. Patent Application No. 13/969,179, mailed Mar. 12, 2015 (Attorney's Ref. No. 6583-478) 17 pages
	178	Official Action for U.S. Patent Application No. 13/968,767, mailed Jan. 22, 2015 (Attorney's Ref. No. 6583-479) 15 pages
	179	Official Action for U.S. Patent Application No. 13/969,506, mailed Jan. 23, 2015 (Attorney's Ref. No. 6583-480) 9 pages
	180	Official Action for U.S. Patent Application No. 13/970,374, mailed Dec. 09, 2014 (Attorney's Ref. No. 6583-481) 9 pages
	181	Official Action for U.S. Patent Application No. 13/968,897, mailed Jan. 28, 2015 (Attorney's Ref. No. 6583-489) 18 pages
	182	Official Action for U.S. Patent Application No. 13/968,652, mailed Dec. 05, 2014 (Attorney's Ref. No. 6583-491) 25 pages
	183	Official Action for U.S. Patent Application No. 13/968,652, mailed Apr. 17, 2015 (Attorney's Ref. No. 6583-491) 17 pages
	184	Official Action for U.S. Patent Application No. 13/968,709, mailed Nov. 14, 2014 (Attorney's Ref. No. 6583-493) 17 pages
	185	Official Action for U.S. Patent Application No. 13/968,709, mailed Feb. 23, 2015 (Attorney's Ref. No. 6583-493) 13 pages
	186	Official Action for U.S. Patent Application No. 13/968,903, mailed Jan. 05, 2015 (Attorney's Ref. No. 6583-495) 13 pages
	187	Official Action for U.S. Patent Application No. 13/970,234, mailed Dec. 26, 2014 (Attorney's Ref. No. 6583-496) 13 pages
	188	Notice of Allowance for U.S. Patent Application No. 13/968,969, mailed Jan. 06, 2015 (Attorney's Ref. No. 6583-498) 6 pages
	189	Official Action for U.S. Patent Application No. 13/968,610, mailed Dec. 31, 2014 (Attorney's Ref. No. 6583-499) 7 pages
	190	Notice of Allowance for U.S. Patent Application No. 13/968,610, mailed Feb. 24, 2015 (Attorney's Ref. No. 6583-499) 5 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	9	of	9	Attorney Docket Number	6583-427

	191	Official Action for U.S. Patent Application No. 13/968,732, mailed Dec. 26, 2014 (Attorney's Ref. No. 6583-500) 13 pages
	192	Official Action for U.S. Patent Application No. 13/969,777, mailed Jan. 08, 2015 (Attorney's Ref. No. 6583-501) 11 pages
	193	Official Action for U.S. Patent Application No. 13/969,777, mailed Apr. 15, 2015 (Attorney's Ref. No. 6583-501) 11 pages
	194	Official Action for U.S. Patent Application No. 13/968,630, mailed Nov. 19, 2014 (Attorney's Ref. No. 6583-504) 11 pages
	195	Official Action for U.S. Patent Application No. 13/968,630, mailed Mar. 27, 2015 (Attorney's Ref. No. 6583-504) 15 pages
	196	Official Action for U.S. Patent Application No. 13/969,507, mailed Jan. 27, 2015 (Attorney's Ref. No. 6583-508) 30 pages
	197	Official Action for U.S. Patent Application No. 13/968,937, mailed Dec. 18, 2014 (Attorney's Ref. No. 6583-509) 9 pages
	198	Official Action for U.S. Patent Application No. 13/968,937, mailed Apr. 07, 2015 (Attorney's Ref. No. 6583-509) 10 pages
	199	Official Action for U.S. Patent Application No. 13/969,508, mailed Mar. 05, 2015 (Attorney's Ref. No. 6583-510) 9 pages
	200	Official Action for U.S. Patent Application No. 13/969,510, mailed Feb. 24, 2015 (Attorney's Ref. No. 6583-511) 17 pages
	201	Official Action for U.S. Patent Application No. 13/970,243, mailed Jan. 22, 2015 (Attorney's Ref. No. 6583-519) 14 pages
	202	Official Action for U.S. Patent Application No. 13/970,247, mailed Dec. 22, 2014 (Attorney's Ref. No. 6583-520) 20 pages
	203	Official Action for U.S. Patent Application No. 13/969,504, mailed Feb. 23, 2015 (Attorney's Ref. No. 6583-526) 10 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13969857	SIRPAL, SANJIV
	Examiner	**Art Unit**
	KIEU OANH T BUI	2425

CPC						
Symbol					**Type**	**Version**
H04N		5	/	445	F	2013-01-01
H04N		21	/	42207	I	2013-01-01
H04N		21	/	4332	A	2013-01-01
H04N		21	/	42219	A	2013-01-01
H04N		17	/	04	I	2013-01-01
H04N		5	/	4403	I	2013-01-01
H04N		21	/	4823	I	2013-01-01
H04N		5	/	50	I	2013-01-01
H04N		21	/	4307	I	2013-01-01
H04N		21	/	26291	I	2013-01-01
H04N		21	/	437	I	2013-01-01
H04N		21	/	4622	I	2013-01-01
H04N		21	/	482	I	2013-01-01
H04N		21	/	8166	I	2013-01-01
H04N		21	/	44213	I	2013-01-01
H04N		21	/	44222	I	2013-01-01
H04N		21	/	44204	I	2013-01-01
H04N		21	/	485	I	2013-01-01
H04N		21	/	472	I	2013-01-01
H04N		21	/	4788	I	2013-01-01
H04N		21	/	4828	I	2013-01-01
H04N		21	/	4821	I	2013-01-01
H04N		21	/	4755	I	2013-01-01
H04N		21	/	8173	I	2013-01-01
H04N		21	/	84	I	2013-01-01
H04N		21	/	478	I	2013-01-01
H04N		21	/	8358	I	2013-01-01
G06F		3	/	0481	I	2013-01-01
H04N		21	/	442	I	2013-01-01
H04N		21	/	4882	I	2013-01-01
H04N		21	/	6175	I	2013-01-01

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/KIEU OANH T BUI/ Primary Examiner.Art Unit 2425	07/20/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13969857	SIRPAL, SANJIV
	Examiner	**Art Unit**
	KIEU OANH T BUI	2425

H04N	21	/	8126	I	2013-01-01
H04N	21	/	4858	I	2013-01-01
H04N	21	/	488	I	2013-01-01
H04N	21	/	8133	I	2013-01-01
H04N	21	/	42204	I	2013-01-01
H04N	21	/	4396	I	2013-01-01
H04N	21	/	6125	I	2013-01-01
H04N	21	/	4316	I	2013-01-01
H04N	21	/	433	I	2013-01-01
H04N	21	/	47202	I	2013-01-01
H04N	21	/	435	I	2013-01-01
H04N	21	/	432	I	2013-01-01
H04N	21	/	47	I	2013-01-01
H04L	51	/	32	I	2013-01-01
H04N	21	/	25808	I	2013-01-01
H04N	21	/	4532	I	2013-01-01
G06F	3	/	017	I	2013-01-01
G06F	2203	/	04804	A	2013-01-01
G06F	3	/	04883	I	2013-01-01
H04N	5	/	44	I	2013-01-01
H04N	5	/	4401	I	2013-01-01
H04N	5	/	45	I	2013-01-01

CPC Combination Sets

Symbol	Type	Set	Ranking	Version
/				
/				

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/KIEU OANH T BUI/ Primary Examiner.Art Unit 2425 (Primary Examiner)	07/20/2015 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13969857	SIRPAL, SANJIV
	Examiner	**Art Unit**
	KIEU OANH T BUI	2425

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
725	37	H	0	4	N	5 / 44 (2011.01.01)						

CROSS REFERENCE(S)					
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
725	45	56			

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/KIEU OANH T BUI/ Primary Examiner.Art Unit 2425	07/20/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13969857	SIRPAL, SANJIV
	Examiner	**Art Unit**
	KIEU OANH T BUI	2425

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1	4	17												
	2	5	18												
1	3	6	19												
11	4	7	20												
	5	8	21												
	6	9	22												
	7	10	23												
	8	12	24												
	9	13	25												
	10	14	26												
	11	15	27												
	12	16	28												
	13	17	29												
	14	18	30												
2	15	19	31												
3	16	20	32												

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/KIEU OANH T BUI/ Primary Examiner.Art Unit 2425 (Primary Examiner)	07/20/2015 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

VIZIO Ex. 1002, Page 3516 of 3573
VIZIO v. MMT, IPR2024-00722

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. 3306

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/969,857	08/19/2013	725	2425	6583-427

APPLICANTS
Flextronics AP, LLC, San Jose, CA;

INVENTORS
Sanjiv Sirpal, Oakville, CANADA;

**** CONTINUING DATA ***************************
This appln claims benefit of 61/684,672 08/17/2012
and claims benefit of 61/702,650 09/18/2012
and claims benefit of 61/697,710 09/06/2012
and claims benefit of 61/700,182 09/12/2012
and claims benefit of 61/736,692 12/13/2012
and claims benefit of 61/798,821 03/15/2013
and claims benefit of 61/804,942 03/25/2013
and claims benefit of 61/804,998 03/25/2013
and claims benefit of 61/804,971 03/25/2013
and claims benefit of 61/804,990 03/25/2013
and claims benefit of 61/805,003 03/25/2013
and claims benefit of 61/805,053 03/25/2013
and claims benefit of 61/805,030 03/25/2013
and claims benefit of 61/805,027 03/25/2013
and claims benefit of 61/805,042 03/25/2013
and claims benefit of 61/805,038 03/25/2013

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****
09/03/2013

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /KIEU OANH T BUI/ Examiner's Signature	☐ Met after Allowance KB Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		CANADA	60	20	3

ADDRESS
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
UNITED STATES

TITLE
SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION

FILING FEE	FEES: Authority has been given in Paper	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time)

BIB (Rev. 05/07).

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	1	of	5	Attorney Docket Number	6583-427

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	6008803	12/28/1999	Rowe et al.	
	2	6239794	05/29/2001	Yuen et al.	
	3	6563515	05/13/2003	Reynolds et al.	
	4	6564378	05/13/2003	Satterfield et al.	
	5	6971118	11/29/2005	Akhavan et al.	
	6	7228556	06/05/2007	Beach et al.	
	7	7266726	09/04/2007	Ladd et al.	
	8	7506350	03/17/2009	Johnson	
	9	7543320	06/02/2009	Schein et al.	
	10	8089455	01/03/2012	Wieder	
	11	8473976	06/25/2013	Udani	
	12	8683519	03/25/2014	McCarthy et al.	
	13	8756620	06/17/2014	Papish et al.	
	14	2001/0001160	05/10/2001	Shoff et al.	
	15	2002/0188944	12/12/2002	Noble	
	16	2003/0003876	01/02/2003	Rumsey	
	17	2003/0118323	06/26/2003	Ismail et al.	
	18	2003/0182658	09/25/2003	Alexander	
	19	2003/0208763	11/06/2003	McElhatten et al.	
	20	2004/0148362	07/29/2004	Friedman	
	21	2005/0091596	04/28/2005	Anthony et al.	
	22	2005/0149964	07/07/2005	Thomas et al.	
	23	2005/0160452	07/21/2005	Lawler et al.	
	24	2006/0184972	08/17/2006	Rafey et al.	
	25	2006/0248557	11/02/2006	Stark et al.	
	26	2007/0011702	01/11/2007	Vaysman	
	27	2007/0154163	07/05/2007	Cordray	
	28	2008/0114794	05/15/2008	Craner	
	29	2008/0114861	05/15/2008	Gildred	
	30	2008/0120635	05/22/2008	Trimper et al.	
	31	2008/0133525	06/05/2008	Ott	
	32	2008/0276279	11/06/2008	Gossweiler et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	2	of	5	Attorney Docket Number	6583-427

	33	2008/0282294	11/13/2008	Carpenter et al.	
	34	2009/0013350	01/08/2009	Ohlfs et al.	
	35	2009/0158326	06/18/2009	Hunt et al.	
	36	2009/0158375	06/18/2009	Rodriguez et al.	
	37	2009/0199242	08/06/2009	Johnson et al.	
	38	2009/0213079	08/27/2009	Segal et al.	
	39	2009/0228919	09/10/2009	Zott et al.	
	40	2009/0271823	10/29/2009	Jung et al.	
	41	2009/0293079	11/26/2009	McKee et al.	
	42	2009/0300674	12/03/2009	Ratsch et al.	
	43	2010/0100512	04/22/2010	Brodin et al.	
	44	2010/0177252	07/15/2010	Larsen et al.	
	45	2010/0180300	07/15/2010	Carpenter et al.	
	46	2010/0241962	09/23/2010	Peterson et al.	
	47	2011/0055873	03/03/2011	Heo et al.	
	48	2011/0107376	05/05/2011	Lee et al.	
	49	2011/0119702	05/19/2011	Jang et al.	
	50	2011/0131506	06/02/2011	Callisendorff	
	51	2011/0154405	06/23/2011	Isaias	
	52	2011/0179453	07/21/2011	Poniatowski	
	53	2011/0179454	07/21/2011	Yates	
	54	2011/0246495	10/06/2011	Mallinson	
	55	2011/0273625	11/10/2011	McMahon et al.	
	56	2011/0321095	12/29/2011	Yao et al.	
	57	2012/0042334	02/16/2012	Choi et al.	
	58	2012/0072952	03/22/2012	Vaysman et al.	
	59	2012/0076473	03/29/2012	Kunkel et al.	
	60	2012/0090004	04/12/2012	Jeong	
	61	2012/0099024	04/26/2012	Ryu et al.	
	62	2012/0144416	06/07/2012	Wetzer et al.	
	63	2012/0147049	06/14/2012	Lee	
	64	2012/0147825	06/14/2012	Hassan et al.	
	65	2012/0154449	06/21/2012	Ramagem et al.	
	66	2012/0173979	07/05/2012	Lee	
	67	2012/0174157	07/05/2012	Stinson, III et al.	
	68	2012/0210375	08/16/2012	Wong et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	3	of	5	Attorney Docket Number	6583-427

	69	2012/0210386	08/16/2012	Kim et al.	
	70	2012/0218203	08/30/2012	Kanki	
	71	2012/0229320	09/13/2012	Yu	
	72	2012/0229473	09/13/2012	Tam	
	73	2012/0291068	11/15/2012	Khushoo et al.	
	74	2012/0331505	12/27/2012	Chun et al.	
	75	2013/0014006	01/10/2013	Abellera et al.	
	76	2013/0097640	04/18/2013	Lemmons et al.	
	77	2013/0160065	06/20/2013	Aso et al.	
	78	2013/0238777	09/12/2013	Raleigh	
	79	2013/0238796	09/12/2013	Lentzitzky	
	80	2013/0282839	10/24/2013	Alcala	
	81	2013/0318553	11/28/2013	Yegorov et al.	
	82	2013/0326557	12/05/2013	Kang et al.	
	83	2014/0109143	04/17/2014	Craner	
	84	2014/0173660	06/19/2014	Correa et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]; Number[4]; Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	85	WO 2012/103121	08/02/2012	CYANDIA, INC		

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.
	86	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55494, mailed Apr. 16, 2014 (Attorney's Ref. No. 6583-426-PCT) 9 pages
	87	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055342, mailed Apr. 17, 2014 (Attorney's Ref. No. 6583-434-PCT) 12 pages
	88	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55592, mailed Mar. 10, 2014 (Attorney's Ref. No. 6583-464-PCT) 11 pages
	89	Notice of Allowance for U.S. Patent Application No. 13/864,206, mailed Apr. 16, 2014 (Attorney's Ref. No. 6583-425) 7 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

VIZIO Ex. 1002, Page 3520 of 3573
VIZIO v. MMT, IPR2024-00722

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	4	of	5	Attorney Docket Number	6583-427

	90	Official Action for U.S. Patent Application No. 13/970,409, mailed Jul. 21, 2014 (Attorney's Ref. No. 6583-438) 21 pages
	91	Official Action for U.S. Patent Application No. 13/970,442, mailed Jun. 4, 2014 (Attorney's Ref. No. 6583-441) 10 pages
	92	Official Action for U.S. Patent Application No. 13/970,450 mailed Jul. 09, 2014 (Attorney's Ref. No. 6583-442) 17 pages
	93	Official Action for U.S. Patent Application No. 13/970,453, mailed Jul. 21, 2014 (Attorney's Ref. No. 6583-443) 12 pages
	94	Official Action for U.S. Patent Application No. 13/968,858 mailed May 15, 2014 (Attorney's Ref. No. 6583-444) 6 pages
	95	Official Action for U.S. Patent Application No. 13/968,884, mailed Jun. 25, 2014 (Attorney's Ref. No. 6583-445) 23 pages
	96	Official Action for U.S. Patent Application No. 13/968,876 mailed Jun. 16, 2014 (Attorney's Ref. No. 6583-446) 10 pages
	97	Official Action for U.S. Patent Application No. 13/968,983, mailed Ju. 07, 2014 (Attorney's Ref. No. 6584-449) 15 pages
	98	Official Action for U.S. Patent Application No. 13/968,948 mailed May 6, 2014 (Attorney's Ref. No. 6583-450) 11 pages
	99	Official Action for U.S. Patent Application No. 13/864,120 mailed Jun. 13, 2014 (Attorney's Ref. No. 6583-453) 10 pages
	100	Official Action for U.S. Patent Application No. 13/969,505, mailed Jul. 15, 2014 (Attorney's Ref. No. 6583-454) 7 pages
	101	Official Action for U.S. Patent Application No. 13/969,490 mailed May 23, 2014 (Attorney's Ref. No. 6583-456) 18 pages
	102	Official Action for U.S. Patent Application No. 13/969,492 mailed May 23, 2014 (Attorney's Ref. No. 6583-458) 17 pages
	103	Official Action for U.S. Patent Application No. 13/970,000, mailed Jul. 15, 2014 (Attorney's Ref. No. 6583-463) 12 pages
	104	Official Action for U.S. Patent Application No. 13/970,355, mailed Jul. 07, 2014 (Attorney's Ref. No. 6583-464) 7 pages
	105	Official Action for U.S. Patent Application No. 13/970,374, mailed Jun. 6, 2014 (Attorney's Ref. No. 6583-481) 7 pages
	106	Official Action for U.S. Patent Application No. 13/968,903, mailed Jul. 18, 2014 (Attorney's Ref. No. 6583-495) 14 pages
	107	Official Action for U.S. Patent Application No. 13/968,969, mailed May 6, 2014 (Attorney's Ref. No. 6583-498) 12 pages
	108	Official Action for U.S. Patent Application No. 13/968,610, mailed Apr. 30, 2014 (Attorney's Ref. No. 6583-499) 11 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

VIZIO Ex. 1002, Page 3521 of 3573
VIZIO v. MMT, IPR2024-00722

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	5	of	5	Attorney Docket Number	6583-427

	109	Official Action for U.S. Patent Application No. 13/968,732, mailed May 27, 2014 (Attorney's Ref. No. 6583-500) 12 pages
	110	Official Action for U.S. Patent Application No. 13/969,777, mailed Jun. 25, 2014 (Attorney's Ref. No. 6583-501) 9 pages
	111	Official Action for U.S. Patent Application No. 13/969,510, mailed Jun. 25, 2014 (Attorney's Ref. No. 6583-511) 13 pages
	112	Official Action for U.S. Patent Application No. 13/970,247, mailed Jul. 09, 2014 (Attorney's Ref. No. 6583-520) 19 pages
	113	Official Action for U.S. Patent Application No. 13/969,504, mailed Jul. 15, 2014 (Attorney's Ref. No. 6583-526) 9 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	1	of	4	Attorney Docket Number	6583-427

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	5867227	02/02/1999	Yamaguchi	
	2	6047319	04/04/2000	Olson	
	3	6111614	08/29/2000	Mugura et al.	
	4	6766526	07/20/2004	Ellis	
	5	7623933	11/24/2009	Sarosi et al.	
	6	7698606	04/13/2010	Ladd et al.	
	7	7805634	09/28/2010	Balazich et al.	
	8	8065390	11/22/2011	Cheng	
	9	8281339	10/02/2012	Walker et al.	
	10	8510780	08/13/2013	Stallings et al.	
	11	8516519	08/20/2013	Lee	
	12	8640166	01/28/2014	Craner	
	13	2002/0049970	04/25/2002	Park	
	14	2004/0093616	05/13/2004	Johnson	
	15	2004/0158193	08/12/2004	Bui	
	16	2005/0015804	01/20/2005	LaJoie et al.	
	17	2005/0022237	01/27/2005	Nomura	
	18	2005/0165918	07/28/2005	Wantanabe et al.	
	19	2005/0188402	08/25/2005	de Andrade et all.	
	20	2005/0289603	12/29/2005	Cezeaux et al.	
	21	2006/0090183	04/27/2006	Zito et al.	
	22	2006/0143674	06/29/2006	Jones et al.	
	23	2007/0192715	08/16/2007	Kataria et al.	
	24	2007/0199022	08/23/2007	Moshiri et al.	
	25	2007/0250762	10/25/2007	Mansfield	
	26	2007/0250864	10/25/2007	Diaz Perez	
	27	2008/0092198	04/17/2008	Hutten	
	28	2008/0163307	07/03/2008	Coburn et al.	
	29	2008/0235595	09/25/2008	Krantz et al.	
	30	2009/0106793	04/23/2009	Tecot et al.	
	31	2009/0150379	06/11/2009	Park et al.	
	32	2009/0177981	07/09/2009	Christie et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	2	of	4	Attorney Docket Number	6583-427

	33	2009/0179989	07/16/2009	Bessone et al.	
	34	2009/0241048	09/24/2009	Augustine et al.	
	35	2010/0071019	03/18/2010	Blanchard et al.	
	36	2010/0107112	04/29/2010	Jennings et al.	
	37	2010/0122284	05/13/2010	Yoon et al.	
	38	2011/0022450	01/27/2011	Meredith	
	39	2011/0023608	02/03/2011	Rueger	
	40	2011/0067066	03/17/2011	Barton et al.	
	41	2011/0145881	06/16/2011	Hartman et al.	
	42	2011/0161996	06/30/2011	Hamano et al.	
	43	2011/0167452	07/07/2011	Baumgartner et al.	
	44	2012/0030317	02/02/2012	Smyth et al.	
	45	2012/0033950	02/09/2012	Cordray et al.	
	46	2012/0060094	03/08/2012	Irwin et al.	
	47	2012/0284752	11/08/2012	Christie	
	48	2013/0191869	07/25/2013	Sugiyama et al.	
	49	2013/0275519	10/17/2013	Nichols	
	50	2013/0291015	10/31/2013	Pan	
	51	2013/0332856	12/12/2013	Sanders et al.	
	52	2014/0040819	02/06/2014	Duffy	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]; Number[4]; Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.
	53	Official Action for U.S. Patent Application No. 13/969,846, mailed Aug. 15, 2014 (Attorney's Ref. No. 6583-426) 19 pages
	54	Official Action for U.S. Patent Application No. 13/969,869, mailed Sep. 16, 2014 (Attorney's Ref. No. 6583-428) 20 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	3	of	4	Attorney Docket Number	6583-427

	55	Official Action for U.S. Patent Application No. 13/969,880, mailed Sep. 11, 2014 (Attorney's Ref. No. 6583-431) 10 pages
	56	Official Action for U.S. Patent Application No. 13/969,884, mailed Oct. 23, 2014 (Attorney's Ref. No. 6583-432) 20 pages
	57	Official Action for U.S. Patent Application No. 13/969,887, mailed Oct. 23, 2014 (Attorney's Ref. No. 6583-433) 16 pages
	58	Official Action for U.S. Patent Application No. 13/969,482, mailed Oct. 21, 2014 (Attorney's Ref. No. 6583-434) 22 pages
	59	Official Action for U.S. Patent Application No. 13/969,485, mailed Oct. 02, 2014 (Attorney's Ref. No. 6583-435) 21 pages
	60	Official Action for U.S. Patent Application No. 13/970,388, mailed Sep. 04, 2014 (Attorney's Ref. No. 6583-436) 14 pages
	61	Official Action for U.S. Patent Application No. 13/970,398, mailed Sep. 02, 2014 (Attorney's Ref. No. 6583-437) 14 pages
	62	Official Action for U.S. Patent Application No. 13/970,420, mailed Oct. 09, 2014 (Attorney's Ref. No. 6583-439) 15 pages
	63	Official Action for U.S. Patent Application No. 13/970,427, mailed Sep. 30, 2014 (Attorney's Ref. No. 6583-440) 24 pages
	64	Official Action for U.S. Patent Application No. 13/970,442, mailed Oct. 07, 2014 (Attorney's Ref. No. 6583-441) 10 pages
	65	Official Action for U.S. Patent Application No. 13/969,588, mailed Nov. 10, 2014 (Attorney's Ref. No. 6583-452) 11 pages
	66	Official Action for U.S. Patent Application No. 13/969,487, mailed Sep. 11, 2014 (Attorney's Ref. No. 6583-455) 10 pages
	67	Official Action for U.S. Patent Application No. 13/969,491, mailed Oct. 08, 2014 (Attorney's Ref. No. 6583-457) 21 pages
	68	Official Action for U.S. Patent Application No. 13/864,214, mailed Aug. 19, 2014 (Attorney's Ref. No. 6583-469) 17 pages
	69	Official Action for U.S. Patent Application No. 13/969,506, mailed Oct. 02, 2014 (Attorney's Ref. No. 6583-480) 9 pages
	70	Official Action for U.S. Patent Application No. 13/968,665, mailed Oct. 09, 2014 (Attorney's Ref. No. 6583-488) 12 pages
	71	Official Action for U.S. Patent Application No. 13/968,897, mailed Aug. 15, 2014 (Attorney's Ref. No. 6583-489) 15 pages
	72	Official Action for U.S. Patent Application No. 13/970,234, mailed Aug. 12, 2014 (Attorney's Ref. No. 6583-496) 19 pages
	73	Official Action for U.S. Patent Application No. 13/968,969, mailed Aug. 19, 2014 (Attorney's Ref. No. 6583-498) 14 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	4	of	4	Attorney Docket Number	6583-427

	74	Official Action for U.S. Patent Application No. 13/968,610, mailed Aug. 19, 2014 (Attorney's Ref. No. 6583-499) 13 pages
	75	Official Action for U.S. Patent Application No. 13/968,630, mailed Jul. 31, 2014 (Attorney's Ref. No. 6583-504) 9 pages
	76	Official Action for U.S. Patent Application No. 13/969,507, mailed Aug. 29, 2014 (Attorney's Ref. No. 6583-508) 30 pages
	77	Official Action for U.S. Patent Application No. 13/969,508, mailed Nov. 07, 2014 (Attorney's Ref. No. 6583-510) 10 pages
	78	Official Action for U.S. Patent Application No. 13/969,510, mailed Nov. 03, 2014 (Attorney's Ref. No. 6583-511) 16 pages
	79	Official Action for U.S. Patent Application No. 13/970,243, mailed Aug. 22, 2014 (Attorney's Ref. No. 6583-519) 20 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13969857	SIRPAL, SANJIV
	Examiner	Art Unit
	KIEU OANH T BUI	2425

CPC- SEARCHED		
Symbol	Date	Examiner
H04N 5/4403	7/8/15	KB

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
725	37, 45, 56	7/8 & 7/20/15	KB

SEARCH NOTES		
Search Notes	Date	Examiner
EAST SEARCHED	7/8 & 7/20/15	KB

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
725 CLASS		7/8 & 7/20/15	KB

VIZIO Ex. 1002, Page 3527 of 3573
VIZIO v. MMT, IPR2024-00722

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L5	11	"second user interface" and "second navigation bar"	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:50
L6	7	L5 and "drop down"	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:50
L7	7	L6 and horizontal	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:50
L8	7	L7 and (iTV intelligentTV)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:50
L9	7	"second user interface" near9 "second navigation bar"	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:51
L10	7	9 and ("different user interface" near9 "second navigation bar")	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:52
L11	1	9 and ("different user interface" near9 "second navigation bar").clm.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:52
L15	285	(sanjiv near2 sirpal).in.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:57
L16	4	15 and ("different user interface" near9 "second navigation bar")	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:58
L17	1	16 and ("different user interface" near9 "second navigation bar").clm.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/26 22:58
S1	44610	"725"/$.ccls.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/13 02:33
S2	19092	S1 and "user interfaces"	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/13 02:33
S3	276	S2 and "second user interface"	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/13 02:33
S4	6	S3 and "second navigation bar"	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/13 02:34
S5	11	"second user interface" and "second navigation bar"	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/13 02:34
S6	7	S5 and "drop down"	US-PGPUB; USPAT; EPO;	OR	ON	2015/07/13 02:34

VIZIO Ex. 1002, Page 3528 of 3573
VIZIO v. MMT, IPR2024-00722

			JPO			
S7	7	S6 and horizontal	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/13 02:35
S8	7	S7 and (iTV intelligentTV)	US-PGPUB; USPAT; EPO; JPO	OR	ON	2015/07/13 02:35

7/ 26/ 2015 10:59:22 PM
C:\ Users\ kbui1\ Documents\ EAST\ Workspaces\ 13969857.wsp

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
(Use as many sheets as necessary)				First Named Inventor	Sanjiv Sirpal
				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	1	of	11	Attorney Docket Number	6583-427

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	4284849	08/18/1981	Anderson et al.	
	2	5539479	07/23/1996	Bertram	
	3	5964839	10/12/1999	Johnson et al.	
	4	6177931	01/23/2001	Alexander et al.	
	5	6493038	12/10/2002	Singh et al.	
	6	6629077	09/30/2003	Arling et al.	
	7	6661468	12/09/2003	Alten et al.	
	8	6704062	03/09/2004	Ahida	
	9	7174126	02/06/2007	McElhatten et al.	
	10	7233316	06/19/2007	Smith et al.	
	11	7363591	04/22/2008	Goldthwaite et al.	
	12	7487529	02/03/2009	Orlick	
	13	7493641	02/17/2009	Klosterman et al.	
	14	7577923	08/18/2009	Beam et al.	
	15	7685520	03/23/2010	Rashkovskiy et al.	
	16	7822716	10/26/2010	Lee et al.	
	17	7880077	02/01/2011	Pauws et al.	
	18	7900228	03/01/2011	Stark et al.	
	19	7904924	03/08/2011	De Heer et al.	
	20	7908635	03/15/2011	Barton et al.	
	21	8006201	08/23/2011	Bhattacharya	
	22	8127329	02/28/2012	Kunkel et al.	
	23	8151215	04/03/2012	Baurmann et al.	
	24	8166511	04/24/2012	Griggs	
	25	8201104	06/12/2012	Yamamoto et al.	
	26	8220021	07/10/2012	Look et al.	
	27	2001/0010097	07/26/2001	Lee	
	28	2001/0056577	12/27/2001	Gordon et al.	
	29	2002/0056098	05/09/2002	White	
	30	2002/0067376	06/06/2002	Martin et al.	
	31	2002/0152267	10/17/2002	Lennon	
	32	2003/0084449	05/01/2003	Chane et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	2	of	11	Attorney Docket Number	6583-427

	33	2003/0110234	06/12/2003	Egli et al.	
	34	2003/0151621	08/14/2003	McEvilly et al.	
	35	2003/0177498	09/18/2003	Ellis et al.	
	36	2003/0182659	09/25/2003	Ellis et al.	
	37	2003/0225777	12/04/2003	Marsh	
	38	2003/0226146	12/04/2003	Thurston et al.	
	39	2004/0103120	05/27/2004	Fickle et al.	
	40	2004/0117831	06/17/2004	Ellis et al.	
	41	2004/0119815	06/24/2004	Soloff	
	42	2004/0211282	10/28/2004	Kim	
	43	2004/0216156	10/28/2004	Wagner	
	44	2004/0237108	11/25/2004	Drazin et al.	
	45	2005/0188318	08/25/2005	Tamir et al.	
	46	2005/0232210	10/20/2005	Karaoguz et al.	
	47	2006/0031875	02/09/2006	Yu	
	48	2006/0064716	03/23/2006	Sull et al.	
	49	2006/0101504	05/11/2006	Aravamudan et al.	
	50	2006/0117337	06/01/2006	Shivaji Rao et al.	
	51	2006/0158838	07/20/2006	Kinoshita et al.	
	52	2006/0262116	11/23/2006	Moshiri et al.	
	53	2006/0280449	12/14/2006	Ogawa et al.	
	54	2007/0028282	02/01/2007	Kooijmans et al.	
	55	2007/0050733	03/01/2007	Lee et al.	
	56	2007/0061724	03/15/2007	Slothouber et al.	
	57	2007/0096939	05/03/2007	Walrath	
	58	2007/0143809	06/21/2007	Chen et al.	
	59	2007/0261090	11/08/2007	Miller et al.	
	60	2008/0022309	01/24/2008	Begeja et al.	
	61	2008/0086745	04/10/2008	Knudson et al.	
	62	2008/0098433	04/24/2008	Hardacker et al.	
	63	2008/0141307	06/12/2008	Whitehead	
	64	2008/0177828	07/24/2008	Accarie et al.	
	65	2009/0160764	08/20/2008	Myllymäki	
	66	2008/0244637	10/02/2008	Candelore	
	67	2008/0288461	11/20/2008	Glennon et al.	
	68	2008/0307457	12/11/2008	Yang et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	3	of	11	Attorney Docket Number	6583-427

	69	2009/0019485	01/15/2009	Ellis et al.	
	70	2009/0064222	03/05/2009	Dawson et al.	
	71	2009/0129340	05/21/2009	Handa	
	72	2009/0199237	08/06/2009	White et al.	
	73	2009/0204929	08/13/2009	Baurmann et al.	
	74	2009/0210910	08/20/2009	Smith et al.	
	75	2009/0235311	09/17/2009	Michel et al.	
	76	2009/0249394	10/01/2009	Schwesinger et al.	
	77	2009/0293078	11/26/2009	Pirani et al.	
	78	2010/0013997	01/21/2010	Whang	
	79	2010/0031193	02/04/2010	Stark et al.	
	80	2010/0050219	02/25/2010	Angiolillo et al.	
	81	2010/0086277	04/08/2010	Craner	
	82	2010/0161506	06/24/2010	Bosenick et al.	
	83	2010/0172407	07/08/2010	Ramaswamy	
	84	2010/0180292	07/15/2010	Epstein et al.	
	85	2010/0201890	08/12/2010	Degonde et al.	
	86	2010/0225830	09/09/2010	Blanchard et al.	
	87	2010/0293497	11/18/2010	Peterson	
	88	2010/0306402	12/02/2010	Russell et al.	
	89	2011/0016492	01/20/2011	Morita	
	90	2011/0035774	02/10/2011	Parker	
	91	2011/0041150	02/17/2011	Schein et al.	
	92	2011/0047572	02/24/2011	Hill et al.	
	93	2011/0060661	03/10/2011	Chai et al.	
	94	2011/0072480	03/24/2011	Stone	
	95	2011/0074591	03/31/2011	Arling et al.	
	96	2011/0078745	03/31/2011	Macrae et al.	
	97	2011/0093888	04/21/2011	Araki et al.	
	98	2011/0126251	05/26/2011	LaFreniere et al.	
	99	2011/0125755	05/26/2011	Kaila et al.	
	100	2011/0119626	06/15/2011	Faenger et al.	
	101	2011/0145860	06/16/2011	Wei	
	102	2011/0154198	06/23/2011	Bachman et al.	
	103	2011/0173657	07/14/2011	Thomas et al.	
	104	2011/0187929	08/04/2011	Suzuki et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	4	of	11	Attorney Docket Number	6583-427

	105	2011/0213700	09/01/2011	Sant'Anselmo	
	106	2011/0219395	09/08/2011	Moshiri et al.	
	107	2011/0252446	10/13/2011	Jeong et al.	
	108	2011/0273552	11/10/2011	Wang et al.	
	109	2011/0276995	11/10/2011	Alten et al.	
	110	2011/0289067	11/24/2011	Jordan et al.	
	111	2011/0289419	11/24/2011	Yu et al.	
	112	2011/0289452	11/24/2011	Jordan et al.	
	113	2011/0321098	12/29/2011	Bangalore et al.	
	114	2012/0002951	01/05/2012	Reisman	
	115	2012/0011545	01/12/2012	Doets et al.	
	116	2012/0069131	03/22/2012	Abelow	
	117	2012/0079096	03/29/2012	Cowan et al.	
	118	2012/0086857	04/12/2012	Kim et al.	
	119	2012/0096264	04/19/2012	Traversat et al.	
	120	2012/0110623	05/03/2012	Hill et al.	
	121	2012/0120316	05/17/2012	Lee	
	122	2012/0144422	06/06/2012	Han et al.	
	123	2012/0144423	06/07/2012	Kim et al.	
	124	2012/0151006	06/14/2012	McInerney et al.	
	125	2012/0147270	06/14/2012	Kim et al.	
	126	2012/0174039	07/05/2012	Rhoads et al.	
	127	2012/0176546	07/12/2012	Yoon	
	128	2012/0200574	08/09/2012	Hill et al.	
	129	2012/0206652	08/16/2012	Yi	
	130	2012/0210370	08/16/2012	Kim et al.	
	131	2012/0210275	08/16/2012	Park et al.	
	132	2012/0210355	08/16/2012	Kim et al.	
	133	2012/0221972	08/30/2012	Dougall et al.	
	134	2012/0257108	10/11/2012	Friedlander et al.	
	135	2012/0260284	10/11/2012	Friedlander et al.	
	136	2014/0049651	02/20/2014	Voth	
	137	2014/0049691	02/20/2014	Burdzinski et al.	
	138	2014/0049692	02/20/2014	Sirpal et al.	
	139	2014/0049693	02/20/2014	Selim et al.	
	140	2014/0052785	02/20/2014	Sirpal	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	5	of	11	Attorney Docket Number	6583-427

	141	2014/0052786	02/20/2014	de Paz	
	142	2014/0053176	02/20/2014	Milano et al.	
	143	2014/0053177	02/20/2014	Voth	
	144	2014/0053178	02/20/2014	Voth et al.	
	145	2014/0053179	02/20/2014	Voth	
	146	2014/0053180	02/20/2014	Shoykher	
	147	2014/0053190	02/20/2014	Sirpal	
	148	2014/0053191	02/20/2014	Selim	
	149	2014/0053193	02/20/2014	Selim et al.	
	150	2014/0053194	02/20/2014	Shoykher et al.	
	151	2014/0053195	02/20/2014	Sirpal et al.	
	152	2014/0053196	02/20/2014	Selim	
	153	2014/0053197	02/20/2014	Shoykher et al.	
	154	2014/0053198	02/20/2014	Sirpal et al.	
	155	2014/0053200	02/20/2014	de Paz et al.	
	156	2014/0053202	02/20/2014	Selim	
	157	2014/0053203	02/20/2014	Csiki	
	158	2014/0053204	02/20/2014	Milano	
	159	2014/0053205	02/20/2014	Sirpal et al.	
	160	2014/0053206	02/20/2014	Shoykher et al.	
	161	2014/0053207	02/20/2014	Shoykher et al.	
	162	2014/0053208	02/20/2014	Sirpal et al.	
	163	2014/0053211	02/20/2014	Milano	
	164	2014/0053212	02/20/2014	Shoykher et al.	
	165	2014/0053221	02/20/2014	Sirpal et al.	
	166	2014/0053222	02/20/2014	Shoykher et al.	
	167	2014/0053225	02/20/2014	Shoykher et al.	
	168	2014/0055673	02/27/2014	Sirpal et al.	
	169	2014/0059578	02/27/2014	Voth et al.	
	170	2014/0059480	02/27/2014	de Paz et al.	
	171	2014/0059589	02/27/2014	Sirpal	
	172	2014/0059596	02/27/2014	Dourado	
	173	2014/0059598	02/27/2014	Milano	
	174	2014/0059599	02/27/2014	Sirpal et al.	
	175	2014/0059600	02/27/2014	Duarado	
	176	2014/0059601	02/27/2014	Sirpal	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	6	of	11	Attorney Docket Number	6583-427

	177	2014/0059602	02/27/2014	Sirpal	
	178	2014/0059603	02/27/2014	Lee et al.	
	179	2014/0059605	02/27/2014	Sirpal et al.	
	180	2014/0059606	02/27/2014	Selim et al.	
	181	2014/0059609	02/27/2014	Duarado	
	182	2014/0059610	02/27/2014	Sirpal et al.	
	183	2014/0059612	02/27/2014	Selim	
	184	2014/0059613	02/27/2014	Burdzinski et al.	
	185	2014/0059614	02/27/2014	Shoykher et al.	
	186	2014/0059615	02/27/2014	Sirpal et al.	
	187	2014/0059625	02/27/2014	Dourado et al.	
	188	2014/0059626	02/27/2014	Selim	
	189	2014/0059635	02/27/2014	Sirpal et al.	
	190	2014/0059637	02/27/2014	Chen et al.	
	191	2014/0067954	03/06/2014	Sirpal	
	192	2014/0068673	03/06/2014	Sirpal et al.	
	193	2014/0068674	03/06/2014	Sirpal et al.	
	194	2014/0068682	03/06/2014	Selim et al.	
	195	2014/0068683	03/06/2014	Selim et al.	
	196	2014/0068685	03/06/2014	Selim et al.	
	197	2014/0068689	03/06/2014	Sirpal et al.	
	198	2014/0075475	03/13/2014	Sirpal et al.	
	199	2014/0075476	03/13/2014	de Paz et al.	
	200	2014/0075477	03/13/2014	de Paz et al.	
	201	2014/0075479	03/13/2014	Soto et al.	
	202	2014/0075483	03/13/2014	de Paz et al.	
	203	2014/0075484	03/13/2014	Selim et al.	
	204	2014/0075487	03/13/2014	Selim et al.	

UNPUBLISHED U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Filing Date MM-DD-YYYY	Name of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	205	13/970420	08/19/2013	Selim et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	7	of	11	Attorney Docket Number	6583-427

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]; Number[4]; Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	206	CN 1832534	09/13/2006	SHENZHEN DIWEITE DIGITAL VIDEO TECHNOLOG CORP.		(English abstract)
	207	CN 101472102	07/01/2009	KONKA GROUP CO., LTD.		(English abstract)
	208	CN 101540850	09/23/2009	SHENZHEN TCL NEW TECHNOLOGY LTD		(English abstract)
	209	CN 101567992	10/28/2009	ALI CORP		(English abstract)
	210	CN 201937743	08/17/2011	SVA TECHNOLOGIES CO., LTD.		(English abstract)
	211	EP 1031929	08/30/2000	HEWLETT-PACKARD COMPANY		
	212	EP 1067458	01/10/2001	CANAL + SOCIETE ANONYME		
	213	EP 1770956	04/04/2007	BRITISH TELECOMMUNICATIO NS		
	214	EP 1865723	12/12/2007	SONY NETSERVICES GMBH		
	215	EP 2328346	06/01/2011	UNITED VIDEO PROPERTIES, INC.		
	216	EP 2348724	07/27/2011	KABEL DEUTSCHLAND GMBH		
	217	EP 2439935	04/11/2012	LG ELECTRONICS INC.		
	218	EP 2487922	08/15/2012	LG ELECTRONICS, INC.		
	219	WO 99/21308	04/29/1999	SONY ELECTRONICS, INC.		
	220	WO 99/35849	07/15/1999	AMIGA DEVELOPMENT LLC		
	221	WO 2000/005884	02/03/2000	MATE MEDIA ACCESS TECHNOLOGIES LTD.		

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	8	of	11	Attorney Docket Number	6583-427

	222	WO 01/06784	01/15/2001	UNITED VIDEO PROPERTIES INC		
	223	WO 01/06788	01/25/2001	UNITED VIDEO PROPERTIES, INC.		
	224	WO 02/080552	10/10/2002	KONINKL PHILIPS ELECTRONICS NV		
	225	WO 03/044755	05/30/2003	BEHAVIORAL INFORMATICS, INC.		
	226	WO 2007/137611	12/06/2007	TELECOM ITALIA S.P.A.		
	227	WO 2011/148054	12/01/2011	AXEL TECHNOLOGIES		
	228	WO 2011/163481	12/29/2011	HILCREST LAB INC		
	229	WO 2012/030024	03/08/2012	LG ELECTRONICS INC.		
	230	WO 2012/068438	05/24/2012	THOMSON LICENSING		
	231	WO 2012/073027	06/07/2012	YOUVIEW TV LTD		
	232	WO 2012/094247	07/12/2012	ROVI TECHNOLOGIES CORPORATION		
	233	WO 2014/026636	02/20/2014	FLEXTRONICS AP, LLC		
	234	WO 2014/026640	02/20/2014	FLEXTRONICS AP, LLC		
	235	WO 2014/028067	02/20/2014	FLEXTRONICS AP, LLC		
	236	WO 2014/028068	02/20/2014	FLEXTRONICS AP, LLC		
	237	WO 2014/028069	02/20/2014	FLEXTRONICS AP, LLC		
	238	WO 2014/028071	02/20/2014	FLEXTRONICS AP, LLC		
	239	WO 2014/028074	02/20/2014	FLEXTRONICS AP, LLC		

NON-PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.
	240	TVONICSUK "Tvonics: How to use the EPG search function." 1 pages retrieved from the internet on Nov. 11, 2013 from [www.youtube.com/watch?v=H8euZ0lydo]

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	9	of	11	Attorney Docket Number	6583-427

	241	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/36844, mailed Jun. 28, 2013 (Attorney's Ref. No. 6583-424-PCT) 8 pages
	242	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/36843, mailed Jun. 28, 2013 (Attorney's Ref. No. 6583-425-PCT) 8 pages
	243	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/36826, mailed Jun. 17, 2013 (Attorney's Ref. No. 6583-430-PCT) 8 pages
	244	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55589, mailed Dec. 19, 2013 (Attorney's Ref. No. 6583-436-PCT) 9 pages
	245	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055289, mailed Dec. 02, 2013 (Attorney's Ref. No. 6583-444-PCT) 7 pages
	246	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055288, mailed Dec. 02, 2013 (Attorney's Ref. No. 6583-445-PCT) 9 pages
	247	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055286, mailed Dec. 02, 2013 (Attorney's Ref. No. 6583-446-PCT) 8 pages
	248	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55285, mailed Dec. 11, 2013 (Attorney's Ref. No. 6583-447-PCT) 8 pages
	249	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055284, mailed Jan. 14, 2014 (Attorney's Ref. No. 6583-448-PCT) 12 pages
	250	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055293, mailed Dec. 02, 2013 (Attorney's Ref. No. 6583-449-PCT) 12 pages
	251	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055294, mailed Dec. 02, 2013 (Attorney's Ref. No. 6583-450-PCT) 10 pages
	252	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055296, mailed Nov. 29, 2013 (Attorney's Ref. No. 6583-451-PCT) 9 pages
	253	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55493, mailed Nov. 07, 2013 (Attorney's Ref. No. 6583-452-PCT) 9 pages
	254	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/036828, mailed Jun. 28, 2013 (Attorney's Ref. No. 6583-453-PCT) 12 pages
	255	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055340, mailed Feb. 10, 2014 (Attorney's Ref. No. 6583-454-PCT) 10 pages
	256	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55551, mailed Dec. 06, 2013 (Attorney's Ref. No. 6583-463-PCT) 7 pages
	257	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/036819, mailed Jun. 17, 2013 (Attorney's Ref. No. 6583-469-PCT) 9 pages
	258	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/036782, mailed Jun. 28, 2013 (Attorney's Ref. No. 6583-470-PCT) 9 pages
	259	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/36678, mailed Aug. 30, 2013 (Attorney's Ref. No. 6583-471-PCT) 9 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	10	of	11	Attorney Docket Number	6583-427

	260	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/036804, mailed Jul. 01, 2013 (Attorney's Ref. No. 6583-472-PCT) 13 pages
	261	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55405, mailed Jan. 17, 2014 (Attorney's Ref. No. 6583-478-PCT) 8 pages
	262	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055278, mailed Mar. 11, 2014 (Attorney's Ref. No. 6583-479) 9 pages
	263	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55509, mailed nov. 08, 2013 (Attorney's Ref. No. 6583-481-PCT) 9 pages
	264	International Search Report and Written Opinion for Intenational (PCT) Patent Application No. PCT/CN2013/081639, mailed Nov. 28, 2013 (Attorney's Ref. No. 6583-487-PCT) 10 pages
	265	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055303, mailed Dec. 05, 2013 (Attorney's Ref. No. 6583-488-PCT) 8 pages
	266	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055280, mailed Jan. 10, 2014 (Attorney's Ref. No. 6583-489-PCT) 10 pages
	267	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55383, mailed Nov. 13, 2013 (Attorney's Ref. No. 6583-490-PCT) 9 pages
	268	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055344, mailed Mar. 11, 2014 (Attorney's Ref. No. 6583-491-PCT) 8 pages
	269	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055345, mailed Dec. 06, 2013 (Attorney's Ref. No. 6583-492-PCT) 7 pages
	270	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55371, mailed No. 08, 2013 (Attorney's Ref. No. 6583-493-PCT) 7 pages
	271	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55389, mailed Mar. 10, 2014 (Attorney's Ref. No. 6583-494-PCT) 10 pages
	272	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055283, mailed Mar. 04, 2014 (Attorney's Ref. No. 6583-495-PCT) 7 pages
	273	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55564, mailed Nov. 22, 2013 (Attorney's Ref. No. 6583-496-PCT) 7 pages
	274	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55379, mailed Dec. 06, 2013 (Attorney's Ref. No. 6583-497-PCT) 8 pages
	275	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055349, mailed Nov. 29, 2013 (Attorney's Ref. No. 6583-498-PCT) 7 pages
	276	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055312, mailed Dec. 05, 2013 (Attorney's Ref. No. 6583-499-PCT) 8 pages
	277	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55374, mailed Nov. 12, 2013 (Attorney's Ref. No. 6583-500-PCT) 8 pages
	278	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55542, mailed Mar. 10, 2014 (Attorney's Ref. No. 6583-501-PCT) 9 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	11	of	11	Attorney Docket Number	6583-427

	279	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55315, mailed Jan. 24, 2014 (Attorney's Ref. No. 6583-502-PCT) 9 pages
	280	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055317, mailed Dec. 02, 2013 (Attorney's Ref. No. 6583-503-PCT) 9 pages
	281	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055318, mailed Jan. 09, 2014 (Attorney's Ref. No. 6583-504-PCT) 10 pages
	282	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055319, mailed Mar. 11, 2014 (Attorney's Ref. No. 6583-505-PCT) 7 pages
	283	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055321, mailed Dec. 06, 2013 (Attorney's Ref. No. 6583-506-PCT) 9 pages
	284	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/CN2013/081630, mailed Nov. 21, 2013 (Attorney's Ref. No. 6583-507-PCT) 11 pages
	285	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/055298, mailed Nov. 29, 2013 (Attorney's Ref. No. 6583-509-PCT) 8 pages
	286	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55567, mailed Dec. 20, 2013 (Attorney's Ref. No. 6583-519-PCT) 10 pages
	287	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55570, mailed Nov. 22, 2013 (Attorney's Ref. No. 6583-520-PCT) 8 pages
	288	Official Action for U.S. Patent Application No. 13/864,206, mailed Nov. 27, 2013 (Attorney's Ref. No. 6583-425) 17 pages
	289	Official Action for U.S. Patent Application No. 13/864,214, mailed Mar. 12, 2014 (Attorney's Ref. No. 6583-469) 12 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

VIZIO v. MMT, IPR2024-00722

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 2425
Sanjiv Sirpal	Confirmation No.: 3306
Serial No.: 13/969,857	Examiner: Kieu Oanh T Bui
Filed: August 19, 2013	
Atty. File No.: 6583-427	***Submitted via EFS-Web***
Entitled: "SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION"	

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

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

Dear Commissioner:

Applicant submits these Comments on Statement of Reasons for Allowance to address further the Notice of Allowability ("Notice") having a mailing date of August 21, 2015.

In the Notice, the Examiner's stated reasons for allowance were that:

> Regarding claim 3, the prior art of record fails to teach or suggest each and every feature of the present invention for "a method for providing a user interface in an intelligent television, the method comprising:
>
> receiving, by a processor of the intelligent television, a selection associated with a first navigation bar in the user interface of the intelligent television;
>
> determining if a second user interface, associated with the selection, can contain a second navigation bar;
>
> if a second user interface, associated with the selection, can contain a second navigation bar, rendering a horizontal navigation bar as the second navigation bar in the second user interface; and
>
> if a second user interface, associated with the selection, can not contain a second navigation bar, rendering a different user interface device for the second navigation bar in the second user interface" as claimed, and as claimed in claims 4 and 28.

VIZIO Ex. 1002, Page 3541 of 3573
VIZIO v. MMT, IPR2024-00722

Based on the Notice, the patentability of all other independent and dependent claims is assumed to be based upon the elements as set forth in such claims and that such claims meet all criteria for patentability under §101, §102, §103 and §112.

As is clear from MPEP 1302.14,

> "The statement [of reasons for allowance] is not intended to necessarily state all the reasons for allowance or all the details why claims are allowed and should not be written to specifically or impliedly state that all the reasons for allowance are set forth."

While the above statement may be a stated reason for allowing some independent claims, Applicant submits that some independent claims may have a different reason for allowance and/or that some independent claims may have other reasons for allowance.

Specifically, the prior art fails to teach the following features of Claims 3, 4 and 28:

> 3. A method for providing a user interface in an intelligent television, the method comprising:
>
> receiving, by a processor of the intelligent television, a selection associated with a first navigation bar in the user interface of the intelligent television;
>
> determining if a second user interface, associated with the selection, can contain a second navigation bar;
>
> if a second user interface, associated with the selection, can contain a second navigation bar, rendering a horizontal navigation bar as the second navigation bar in the second user interface; and
>
> if a second user interface, associated with the selection, can not contain a second navigation bar, rendering a different user interface device for the second navigation bar in the second user interface.

> 4. (Original) An intelligent television system comprising:
>
> a memory operable to store social media data;
>
> a processor in communication with the memory, the processor operable to:
>
> execute a user interface application, the user interface application operable to:
>
> receive a selection associated with a first navigation bar in the user interface of the intelligent television;
>
> determine if a second user interface, associated with the selection, can contain a second navigation bar;
>
> if a second user interface, associated with the selection, can contain a second navigation bar, render a horizontal navigation bar as the second navigation bar in the second user interface; and

VIZIO Ex. 1002, Page 3542 of 3573
VIZIO v. MMT, IPR2024-00722

if a second user interface, associated with the selection, can not contain a second navigation bar, render a different user interface device for the second navigation bar in the second user interface.

28. A non-transitory computer readable medium having stored thereon processor executable instructions that cause a computing system to execute a method, the instructions comprising: instructions to receive a selection associated with a first navigation bar in the user interface of the intelligent television; instructions to determine if a second user interface, associated with the selection, can contain a second navigation bar; if a second user interface, associated with the selection, can contain a second navigation bar, instructions to render a horizontal navigation bar as the second navigation bar in the second user interface; and if a second user interface, associated with the selection, can not contain a second navigation bar, instructions to render a different user interface device for the second navigation bar in the second user interface.

Although the Applicant believes that no fees are due for filing these Comments on Statement of Reasons for Allowance, please charge any fees deemed necessary to Deposit Account No. 19-1970.

Respectfully submitted,

SHERIDAN ROSS P.C.

DWS

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: Nov 18, 2015

VIZIO Ex. 1002, Page 3543 of 3573
VIZIO v. MMT, IPR2024-00722

Electronic Acknowledgement Receipt

EFS ID:	24126864
Application Number:	13969857
International Application Number:	
Confirmation Number:	3306
Title of Invention:	SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION
First Named Inventor/Applicant Name:	Sanjiv Sirpal
Customer Number:	111285
Filer:	Douglas W. Swartz/Mary Notter
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-427
Receipt Date:	18-NOV-2015
Filing Date:	19-AUG-2013
Time Stamp:	19:39:25
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	Post Allowance Communication - Incoming	Comments_on_Reasons_for_Allowance.pdf	400189 5b75fcb11eca9461eaae0279b57eda0f6e2fd6e0	no	3

Warnings:	
Information:	

Total Files Size (in bytes):	400189

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 2425
SIRPAL, Sanjiv	Confirmation No.: 3306
Serial No.: 13/969,857	Examiner: Kieu Oanh T Bui
Filed: August 19, 2013	
Atty. File No.: 6583-427	
Entitled: "SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION"	***Submitted Via EFS-Web***

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

AMENDMENT AFTER ALLOWANCE PURSUANT TO 37 CFR § 1.312

Dear Sir/Madam:

Applicants submit this Amendment After Allowance pursuant to 37 CFR § 1.312 in response to the Notice of Allowance and Fee(s) Due having a mailing date of August 21, 2015. An amendment may be entered after the mailing of a Notice of Allowance but prior to payment of the issue fee upon the recommendation of the primary examiner. Therefore, it is respectfully requested that the above-referenced application be amended as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page **2** of this paper.

Remarks/Arguments begin on page **7** of this paper.

AMENDMENTS TO THE CLAIMS

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

Listing of Claims

1-2. (Cancelled)

3. (Original) A method for providing a user interface in an intelligent television, the method comprising:

receiving, by a processor of the intelligent television, a selection associated with a first navigation bar in the user interface of the intelligent television;

determining if a second user interface, associated with the selection, can contain a second navigation bar;

if a second user interface, associated with the selection, can contain a second navigation bar, rendering a horizontal navigation bar as the second navigation bar in the second user interface; and

if a second user interface, associated with the selection, can not contain a second navigation bar, rendering a different user interface device for the second navigation bar in the second user interface.

4. (Currently Amended) An intelligent television system comprising:

a memory operable to store social media data; and

a processor in communication with the memory, the processor ~~operable~~ programmed to:

execute a user interface application, the user interface application ~~operable to~~:

~~receive~~ receiving a selection associated with a first navigation bar in the user interface of the intelligent television;

~~determine~~ determining if a second user interface, associated with the selection, can contain a second navigation bar;

if a second user interface, associated with the selection, can contain a second navigation bar, ~~render~~ rendering a horizontal navigation bar as the second navigation bar in the second user interface; and

VIZIO Ex. 1002, Page 3547 of 3573
VIZIO v. MMT, IPR2024-00722

if a second user interface, associated with the selection, can not contain a second navigation bar, ~~render~~ rendering a different user interface device for the second navigation bar in the second user interface.

5-14. (Cancelled)

15. (Currently Amended) The method as defined in claim 3, further comprises the processor determining one or more of a content and a format of the second navigation bar.

16. (Currently Amended) The method as defined in claim 15, further comprises the processor determining one or more of a format and a characteristic of the second user interface.

17. (Currently Amended) The method as defined in claim 15, wherein the determination of if a second user interface, associated with the selection, can contain a second navigation bar comprises the processor comparing one or more of the content and the format of the second navigation bar with one or more of the format and the characteristic of the second user interface.

18. (Currently Amended) The method as defined in claim 15, wherein if the second navigation bar is too large for the second user interface, the processor renders different user interface device ~~is rendered~~.

19. (Currently Amended) The method as defined in claim 15, further comprises the processor presenting the second user interface with the second navigation bar.

20. (Currently Amended) The method as defined in claim 15, further comprises:

the processor determining if a drop-down navigation bar is needed;

if the drop-down navigation bar is needed, the processor rendering the drop-down navigation bar as the second navigation bar; and

if the drop-down navigation bar is not needed, the processor rendering a vertical navigation bar as the second navigation bar.

VIZIO Ex. 1002, Page 3548 of 3573
VIZIO v. MMT, IPR2024-00722

21. (Previously Presented) The method as defined in claim 15, wherein the drop-down navigation bar includes one or more drop down menus associated with top-level categories presented in the drop-down navigation bar.

22. (Previously Presented) The method as defined in claim 15, wherein the vertical navigation bar includes categories presented vertically in the second user interface.

23. (Currently Amended) The method as defined in claim 15, further comprises the processor presenting the second user interface with the second navigation bar.

24. (Currently Amended) The intelligent television system as defined in claim 4, wherein the user interface application ~~is further operable to~~:

~~determine~~ determines one or more of a content and a format of the second navigation bar;

~~determine~~ determines one or more of a format and a characteristic of the second user interface; and

~~present~~ presents the second user interface with the second navigation bar.

25. (Currently Amended) The intelligent television system as defined in claim 24, wherein the determination of if a second user interface, associated with the selection, can contain a second navigation bar comprises the processor comparing one or more of the content and the format of the second navigation bar with one or more of the format and the characteristic of the second user interface, and wherein if the second navigation bar is too large for the second user interface, the processor renders the different user interface device ~~is rendered~~.

26. (Currently Amended) The intelligent television system as defined in claim 24, wherein the user interface application ~~is further operable to~~:

~~determine~~ determines if a drop-down navigation bar is needed;

if the drop-down navigation bar is needed, ~~render~~ renders the drop-down navigation bar as the second navigation bar;

if the drop-down navigation bar is not needed, ~~render~~ renders a vertical navigation bar as the second navigation bar; and

VIZIO Ex. 1002, Page 3549 of 3573
VIZIO v. MMT, IPR2024-00722

wherein the drop-down navigation bar includes one or more drop down menus associated with top-level categories presented in the drop-down navigation bar, and wherein the vertical navigation bar includes categories presented vertically in the second user interface.

27. (Currently Amended) The intelligent television system as defined in claim 24, wherein the user interface application ~~is further operable to present~~ presents the second user interface with the second navigation bar.

28. (Currently Amended) A non-transitory computer readable medium having stored thereon processor executable instructions that cause a computing system to execute a method, the instructions comprising:

instructions to receive a selection associated with a first navigation bar in the user interface of the intelligent television;

instructions to determine if a second user interface, associated with the selection, can contain a second navigation bar;

if a second user interface, associated with the selection, can contain a second navigation bar, instructions to render a horizontal navigation bar as the second navigation bar in the second user interface; and

if a second user interface, associated with the selection, can not contain a second navigation bar, instructions to render a different user interface device for the second navigation bar in the second user interface.

29. (Previously Presented) The computer readable medium as defined in claim 28, further comprises instructions to: determine one or more of a content and a format of the second navigation bar; determine one or more of a format and a characteristic of the second user interface; and present the second user interface with the second navigation bar.

30. (Previously Presented) The computer readable medium as defined in claim 28, wherein the determination of if a second user interface, associated with the selection, can contain a second navigation bar comprises comparing one or more of the content and the format of the second navigation bar with one or more of the format and the characteristic of the second user

VIZIO Ex. 1002, Page 3550 of 3573
VIZIO v. MMT, IPR2024-00722

interface, and wherein if the second navigation bar is too large for the second user interface, the different user interface device is rendered.

31. (Previously Presented) The computer readable medium as defined in claim 28, further comprises instructions to: determine if a drop-down navigation bar is needed; if the drop-down navigation bar is needed, render the drop-down navigation bar as the second navigation bar; if the drop-down navigation bar is not needed, render a vertical navigation bar as the second navigation bar; and wherein the drop-down navigation bar includes one or more drop down menus associated with top-level categories presented in the drop-down navigation bar, and wherein the vertical navigation bar includes categories presented vertically in the second user interface.

32. (Previously Presented) The computer readable medium as defined in claim 28, further comprises instructions to present the second user interface with the second navigation bar.

VIZIO Ex. 1002, Page 3551 of 3573
VIZIO v. MMT, IPR2024-00722

REMARKS/ARGUMENTS

The amendments to Claims 4, 15-20, and 23-28 do not require an additional search or examination, and the claims as amended are patentable for the same reasons as the independent claims from which they depend. The amendments are requested to further clarify any potential ambiguity in the claims.

Accordingly, Applicant believes that the requirements of 37CFR§1.312 and MPEP§714.16 have been satisfied and entry of this amendment is respectfully requested. Although no fees are believed to be due with the filing of this paper, please charge any deficiency or credit any overpayment to Deposit Account 19-1970.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37,739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: November 20, 2015

VIZIO Ex. 1002, Page 3552 of 3573
VIZIO v. MMT, IPR2024-00722

Electronic Acknowledgement Receipt

EFS ID:	24151702
Application Number:	13969857
International Application Number:	
Confirmation Number:	3306
Title of Invention:	SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION
First Named Inventor/Applicant Name:	Sanjiv Sirpal
Customer Number:	111285
Filer:	Douglas W. Swartz/Amy Duarte
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-427
Receipt Date:	20-NOV-2015
Filing Date:	19-AUG-2013
Time Stamp:	17:12:40
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		6583-427_Rule_312_Amendment.pdf	169552 d155b10f30b7dc3080518b95fc44e3feff1cc14a	yes	7

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment after Notice of Allowance (Rule 312)	1	1
	Claims	2	6
	Applicant Arguments/Remarks Made in an Amendment	7	7
Warnings:			
Information:			
	Total Files Size (in bytes):	169552	

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.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (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 including the Patent, advance orders and notification of maintenance fees 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.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 08/21/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

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 facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/969,857	08/19/2013	Sanjiv Sirpal	6583-427	3306

TITLE OF INVENTION: SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	11/23/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
BUI, KIEU OANH T	2425	725-037000

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/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form 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 Sheridan Ross P.C.
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 has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Flextronics AP, LLC

(B) RESIDENCE: (CITY and STATE OR COUNTRY): San Jose, CA

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☒ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 19-1970 (enclose an extra copy of this form).

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 /Douglas W. Swartz/ Date November 20, 2015

Typed or printed name Douglas W. Swartz Registration No. 37,739

VIZIO Ex. 1002, Page 3555 of 3573
VIZIO v. MMT, IPR2024-00722

Electronic Patent Application Fee Transmittal

Application Number:	13969857
Filing Date:	19-Aug-2013
Title of Invention:	SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION
First Named Inventor/Applicant Name:	Sanjiv Sirpal
Filer:	Douglas W. Swartz/Amy Duarte
Attorney Docket Number:	6583-427

Filed as Large 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:				
Utility Appl Issue Fee	1501	1	960	960

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**960**

Electronic Acknowledgement Receipt

EFS ID:	24151747
Application Number:	13969857
International Application Number:	
Confirmation Number:	3306
Title of Invention:	SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION
First Named Inventor/Applicant Name:	Sanjiv Sirpal
Customer Number:	111285
Filer:	Douglas W. Swartz/Amy Duarte
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-427
Receipt Date:	20-NOV-2015
Filing Date:	19-AUG-2013
Time Stamp:	17:14:25
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$960
RAM confirmation Number	4398
Deposit Account	191970
Authorized User	SWARTZ, DOUGLAS W.
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	6583-427_Issue-fee-transmittal.pdf	85101 02aebcf010c275fc592b16ce350b0cf6dca790e5	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30953 808be4fd18deeea8c69f1b8ffb67483d30feaab5	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	116054		

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 2425
SIRPAL, Sanjiv	Confirmation No.: 3306
Serial No.: 13/969,857	Examiner: Kieu Oanh T Bui
Filed: August 19, 2013	
Atty. File No.: 6583-427	
Entitled: "SYSTEMS AND METHODS FOR PROVIDING USER INTERFACES IN AN INTELLIGENT TELEVISION"	***Submitted Via EFS-Web***

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

OK TO ENTER
/KB/

AMENDMENT AFTER ALLOWANCE PURSUANT TO 37 CFR § 1.312

Dear Sir/Madam:

Applicants submit this Amendment After Allowance pursuant to 37 CFR § 1.312 in response to the Notice of Allowance and Fee(s) Due having a mailing date of August 21, 2015. An amendment may be entered after the mailing of a Notice of Allowance but prior to payment of the issue fee upon the recommendation of the primary examiner. Therefore, it is respectfully requested that the above-referenced application be amended as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page **2** of this paper.

Remarks/Arguments begin on page **7** of this paper.

Response to Rule 312 Communication	Application No.	Applicant(s)
	13/969,857	SIRPAL, SANJIV
	Examiner	Art Unit
	KIEU OANH T. BUI	2425

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

1. ☒ The amendment filed on *20 November 2015* under 37 CFR 1.312 has been considered, and has been:

a) ☒ entered.

b) ☐ entered as directed to matters of form not affecting the scope of the invention.

c) ☐ disapproved because the amendment was filed after the payment of the issue fee.
Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

d) ☐ disapproved. See explanation below.

e) ☐ entered in part. See explanation below.

/KIEU OANH T BUI/
Primary Examiner
Art Unit: 2425

VIZIO Ex. 1002, Page 3561 of 3573
VIZIO v. MMT, IPR2024-00722

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Kieu Oanh T Bui
Sheet	2	of	4	Attorney Docket Number	6583-427

	33	2009/0179989	07/16/2009	Bessone et al.	
	34	2009/0241048	09/24/2009	Augustine et al.	
	35	2010/0071019	03/18/2010	Blanchard et al.	
	36	2010/0107112	04/29/2010	Jennings et al.	
	37	2010/0122284	05/13/2010	Yoon et al.	
	38	2011/0022450	01/27/2011	Meredith	
	39	2011/0023608	02/03/2011	Rueger	
	40	2011/0067066	03/17/2011	Barton et al.	
	41	2011/0145881	06/16/2011	Hartman et al.	
	42	2011/0161996	06/30/2011	Hamano et al.	
	43	2011/0167452	07/07/2011	Baumgartner et al.	
	44	2012/0030317	02/02/2012	Smyth et al.	
	45	2012/0033950	02/09/2012	Cordray et al.	
	46	2012/0060094	03/08/2012	Irwin et al.	
Change(s) applied to document, /J.F./ 8/31/2015	47	2012/0284752	11/08/2012	~~Christie~~ Jung	
	48	2013/0191869	07/25/2013	Sugiyama et al.	
	49	2013/0275519	10/17/2013	Nichols	
	50	2013/0291015	10/31/2013	Pan	
	51	2013/0332856	12/12/2013	Sanders et al.	
	52	2014/0040819	02/06/2014	Duffy	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]; Number[4]; Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

NON-PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.
	53	Official Action for U.S. Patent Application No. 13/969,846, mailed Aug. 15, 2014 (Attorney's Ref. No. 6583-426) 19 pages
	54	Official Action for U.S. Patent Application No. 13/969,869, mailed Sep. 16, 2014 (Attorney's Ref. No. 6583-428) 20 pages

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	2	of	11

Complete if Known	
Application Number	13/969,857
Filing Date	August 19, 2013
First Named Inventor	Sanjiv Sirpal
Art Unit	2425
Examiner Name	Brian T Pendleton
Attorney Docket Number	6583-427

	33	2003/0110234	06/12/2003	Egli et al.	
	34	2003/0151621	08/14/2003	McEvilly et al.	
	35	2003/0177498	09/18/2003	Ellis et al.	
	36	2003/0182659	09/25/2003	Ellis et al.	
	37	2003/0225777	12/04/2003	Marsh	
	38	2003/0226146	12/04/2003	Thurston et al.	
	39	2004/0103120	05/27/2004	Fickle et al.	
	40	2004/0117831	06/17/2004	Ellis et al.	
	41	2004/0119815	06/24/2004	Soloff	
	42	2004/0211282	10/28/2004	Kim	
	43	2004/0216156	10/28/2004	Wagner	
	44	2004/0237108	11/25/2004	Drazin et al.	
	45	2005/0188318	08/25/2005	Tamir et al.	
	46	2005/0232210	10/20/2005	Karaoguz et al.	
	47	2006/0031875	02/09/2006	Yu	
	48	2006/0064716	03/23/2006	Sull et al.	
	49	2006/0101504	05/11/2006	Aravamudan et al.	
	50	2006/0117337	06/01/2006	Shivaji Rao et al.	
	51	2006/0158838	07/20/2006	Kinoshita et al.	
	52	2006/0262116	11/23/2006	Moshiri et al.	
	53	2006/0280449	12/14/2006	Ogawa et al.	
	54	2007/0028282	02/01/2007	Kooijmans et al.	
	55	2007/0050733	03/01/2007	Lee et al.	
	56	2007/0061724	03/15/2007	Slothouber et al.	
	57	2007/0096939	05/03/2007	Walrath	
	58	2007/0143809	06/21/2007	Chen et al.	
	59	2007/0261090	11/08/2007	Miller et al.	
	60	2008/0022309	01/24/2008	Begeja et al.	
	61	2008/0086745	04/10/2008	Knudson et al.	
	62	2008/0098433	04/24/2008	Hardacker et al.	
	63	2008/0141307	06/12/2008	Whitehead	
	64	2008/0177828	07/24/2008	Accarie et al.	
	65	2009/0160764	~~08/20/2008~~	Myllymäki	June 25, 2009
	66	2008/0244637	10/02/2008	Candelore	
	67	2008/0288461	11/20/2008	Glennon et al.	
	68	2008/0307457	12/11/2008	Yang et al.	

Change(s) applied to document, /J.F./ 8/31/2015

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/969,857
				Filing Date	August 19, 2013
				First Named Inventor	Sanjiv Sirpal
(Use as many sheets as necessary)				Art Unit	2425
				Examiner Name	Brian T Pendleton
Sheet	3	of	11	Attorney Docket Number	6583-427

	69	2009/0019485	01/15/2009	Ellis et al.	
	70	2009/0064222	03/05/2009	Dawson et al.	
	71	2009/0129340	05/21/2009	Handa	
	72	2009/0199237	08/06/2009	White et al.	
	73	2009/0204929	08/13/2009	Baurmann et al.	
	74	2009/0210910	08/20/2009	Smith et al.	
	75	2009/0235311	09/17/2009	Michel et al.	
	76	2009/0249394	10/01/2009	Schwesinger et al.	
	77	2009/0293078	11/26/2009	Pirani et al.	
Change(s) applied to document, /J.F./ 9/2/2015	78	2010/0013997	01/21/2010	~~Whang~~ Hwang	
	79	2010/0031193	02/04/2010	Stark et al.	
	80	2010/0050219	02/25/2010	Angiolillo et al.	
	81	2010/0086277	04/08/2010	Craner	
	82	2010/0161506	06/24/2010	Bosenick et al.	
	83	2010/0172407	07/08/2010	Ramaswamy	
	84	2010/0180292	07/15/2010	Epstein et al.	
	85	2010/0201890	08/12/2010	Degonde et al.	
	86	2010/0225830	09/09/2010	Blanchard et al.	
	87	2010/0293497	11/18/2010	Peterson	
	88	2010/0306402	12/02/2010	Russell et al.	
	89	2011/0016492	01/20/2011	Morita	
	90	2011/0035774	02/10/2011	Parker	
	91	2011/0041150	02/17/2011	Schein et al.	
	92	2011/0047572	02/24/2011	Hill et al.	
	93	2011/0060661	03/10/2011	Chai et al.	
	94	2011/0072480	03/24/2011	Stone	
	95	2011/0074591	03/31/2011	Arling et al.	
	96	2011/0078745	03/31/2011	Macrae et al.	
	97	2011/0093888	04/21/2011	Araki et al.	
	98	2011/0126251	05/26/2011	LaFreniere et al.	
	99	2011/0125755	05/26/2011	Kaila et al.	
	100	2011/0119626	06/15/2011	Faenger et al.	
	101	2011/0145860	06/16/2011	Wei	
	102	2011/0154198	06/23/2011	Bachman et al.	
	103	2011/0173657	07/14/2011	Thomas et al.	
	104	2011/0187929	08/04/2011	Suzuki et al.	

Examiner Signature	/Kieu Oanh Bui/ (07/08/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.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. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KB/

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.
13/969,857	01/05/2016	9232168	6583-427	3306

111285 7590 12/16/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 259 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

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 Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Flextronics AP, LLC, San Jose, CA;
Sanjiv Sirpal, Oakville, CANADA;

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.

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court FOR THE EASTERN DISTRICT OF TEXAS on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
23-cv-00060	2/17/2023	FOR THE EASTERN DISTRICT OF TEXAS

PLAINTIFF	DEFENDANT
Touchstream Technologies, Inc.	Altice USA, Inc.; Cequel Communications, LLC; CSC Holdings, LLC; and Friendship Cable of Texas, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	8,356,251	1/15/2013	Touchstream Technologies, Inc.
2			
3			
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

Print Save As... Reset

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 **Director of the U.S. Patent and Trademark Office** **P.O. Box 1450** **Alexandria, VA 22313-1450**	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas, Marshall Division on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
2:22-cv-367	3/13/2023	Eastern District of Texas, Marshall Division

PLAINTIFF	DEFENDANT
Seungman Kim	Samsung Electronics Co., Ltd., Samsung Electronics America, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 11,553,072	1/10/2023	Seungman Kim
2			
3			
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

Continued from page 1:

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
6. 10,419,805	11/14/2017	Multimedia Technologies Pte. Ltd.
7. 9,215,393	12/15/2015	Multimedia Technologies Pte. Ltd.
8. 9,426,527	08/23/2016	Multimedia Technologies Pte. Ltd.
9. 9,077,928	7/7/2015	Multimedia Technologies Pte. Ltd.
10. 9,185,325	11/10/2015	Multimedia Technologies Pte. Ltd.

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas - Marshall Division on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
2:23-cv-124	3/24/2023	Eastern District of Texas - Marshall Division

PLAINTIFF	DEFENDANT
Multimedia Technologies Pte. Ltd.	Vizio Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,055,255	6/9/2015	Multimedia Technologies Pte. Ltd.
2	9,232,168	1/5/2016	Multimedia Technologies Pte. Ltd.
3	9,247,174	1/26/2016	Multimedia Technologies Pte. Ltd.
4	9,510,040	11/29/2016	Multimedia Technologies Pte. Ltd.
5	9,578,384	2/21/2017	Multimedia Technologies Pte. Ltd.

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Western District of Texas on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:23-cv-249	4/5/2023	Western District of Texas

PLAINTIFF	DEFENDANT
Ozmo Licensing LLC	TCL Electronics Holdings Ltd. and TCL Industries Holdings Co., Ltd.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,264,991	2/16/2016	Ozmo Licensing LLC
2	10,873,906	12/22/2020	Ozmo Licensing LLC
3	8,599,814	12/3/2013	Ozmo Licensing LLC
4	11,012,934	5/18/2021	Ozmo Licensing LLC
5	11,122,504	9/14/2021	Ozmo Licensing LLC

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 **Director of the U.S. Patent and Trademark Office** **P.O. Box 1450** **Alexandria, VA 22313-1450**	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Western District of Texas on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:23-cv-249	4/5/2023	Western District of Texas

PLAINTIFF	DEFENDANT
Ozmo Licensing LLC	TCL Electronics Holdings Ltd. and TCL Industries Holdings Co., Ltd.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,264,991	2/16/2016	Ozmo Licensing LLC
2	10,873,906	12/22/2020	Ozmo Licensing LLC
3	8,599,814	12/3/2013	Ozmo Licensing LLC
4	11,012,934	5/18/2021	Ozmo Licensing LLC
5	11,122,504	9/14/2021	Ozmo Licensing LLC

In the above-entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above-entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 **Director of the U.S. Patent and Trademark Office** **P.O. Box 1450** **Alexandria, VA 22313-1450**	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court for the Western District of Texas on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
5:23-cv-387	3/29/2023	for the Western District of Texas

PLAINTIFF	DEFENDANT
RFC Lenders of Texas, LLC	Global-View.net

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	7,430,471	9/30/2008	RFC Lenders of Texas, LLC
2			
3			
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court FOR THE DISTRICT OF DELAWARE on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
TBD	4/3/2023	FOR THE DISTRICT OF DELAWARE

PLAINTIFF	DEFENDANT
INGENUS PHARMACEUTICALS, LLC, and LEIUTIS PHARMACEUTICALS LLP	ACCORD HEALTHCARE, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	10,993,952	5/4/2021	Leiutis Pharmaceuticals Pvt. Ltd.
2			
3			
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy