

United States Patent and Trademark Office
Before the Patent Trial and Appeal Board

***Samsung Electronics Co., Ltd. and
Samsung Electronics America, Inc.***
(Petitioners)

v.

Maxell, Ltd.,
(Patent Owner)

Inter Partes Review

— Nos. IPR2024-00735, IPR2024-00777 | **U.S. Patent No. 11,017,815** —

Petitioners' Presentation

Claim Construction

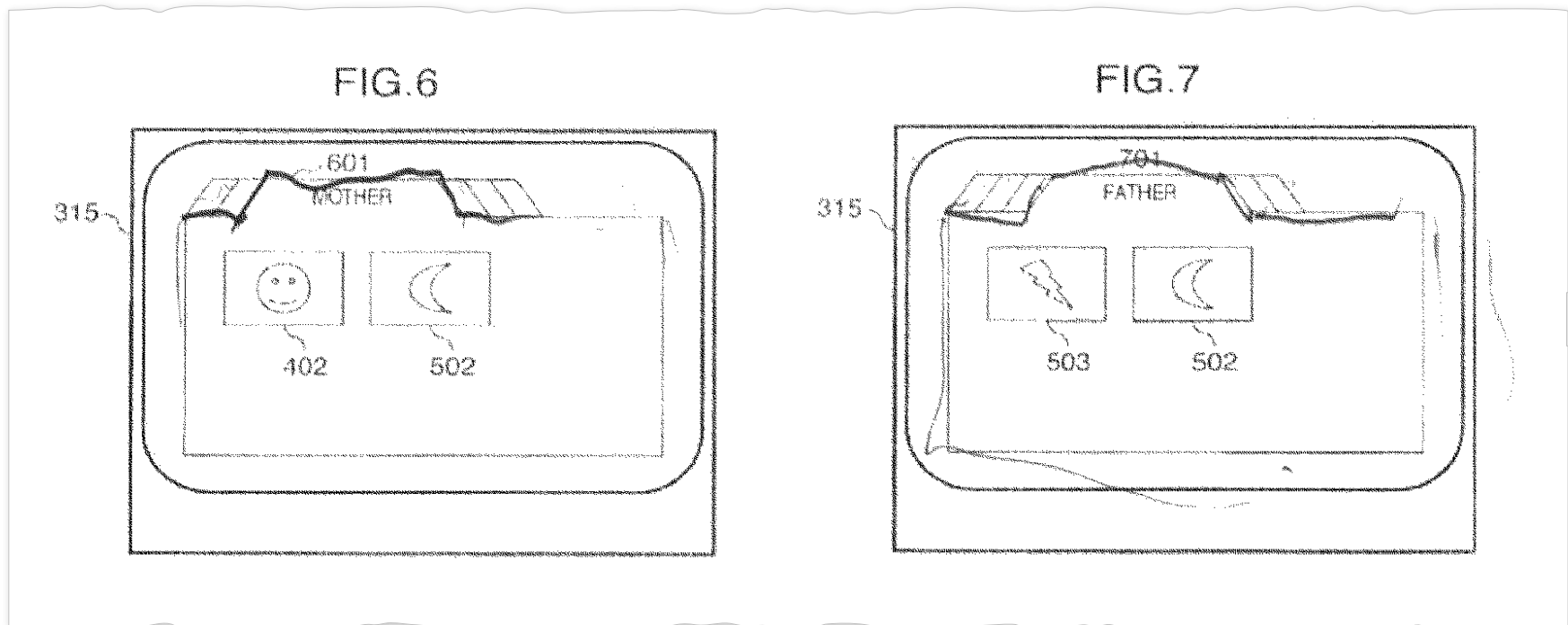
Construction of “second user interface” Limitation (Claims 16 and 21)

“in response to the selection of the first user profile, the display device displays a **second user interface** for a user to select desired video information from among the first video information”

Patent Owner’s Proposed Construction	Petitioners’ Proposed Construction
“in response to the selection of the first user profile, the display displays a new second user dedicated screen for a user to select desired video information to be reproduced from among the first video information” 777 POR at 14	no “new second user dedicated screen” required; first and second user interfaces can be on the same physical and logical screen at the same time Reply at 1

Construction of “second user interface” Limitation (Claims 16 and 21)

Dr. Balakrishnan’s identification of first and second user interfaces



777 Reply at 2

Construction of “second user interface” Limitation (Claims 16 and 21)

Dr. Balakrishnan’s identification of first and second user interfaces

A. (Witness drawing.) So if you see what I’ve done is I see -- in this box is my dedicated user screen. I would not consider this portion to be -- right? So that’s for other stuff. And this one, same thing. This dedicated user screen I would consider to be this. I’m not drawing the straight line straight, but you get my point. And all of this stuff.

EX1072 (Balakrishnan) at 92:11-18;
777 Reply at 1-2

Q. So if I understand correctly, your construction in paragraph 41 of your declaration that talks about a new second user dedicated screen, that dedicated screen can be a part of what’s shown on the display and your construction does not exclude the display of other things on that screen beyond the second user dedicated screen, is that correct?

* * *

A. The only -- if you’re looking at figure 6 and 7, it cannot be the entire display because of those tabby things at the top, you know, that I’ve already talked about.

EX1072 (Balakrishnan) at 93:15-21, 94:15-18;
777 Reply at 1-2

A. So that -- the tags, they -- not tags -- tabs on the top -- I think you know what I mean -- the tabs, those trapezoidal things on the top. All of the icons within the screen would be the first interface that then generates the next screen or the next tab screen, so I can switch between mother or father or go from 402 to something else.

EX1072 (Balakrishnan) at 96:6-12;
777 Reply at 1-2

Construction of “second user interface” Limitation (Claims 16 and 21)

Dr. Balakrishnan's identification of first and second user interfaces

Q. Okay. All right. Is there anything else you think in the '815 patent that discloses this first user interface for a user to select a user profile from among a plurality of user profiles as recited in claim 21?

A. In terms of a figure? I don't have one here. I think I've already talked about the tabs. We've got that. I would leave it at that.

EX1072 (Balakrishnan) at 102:19-103:4; 777 Reply at 1-2

Construction of “second user interface” Limitation (Claims 16 and 21)

- Maxell’s construction is contrary to plain language of claim
- Maxell’s construction is contradicted by its own expert
- Maxell’s construction is unsupported by the ’815 specification because there is no disclosure of a first user interface separate from second user interface
 - Maxell cites to no intrinsic evidence for a “new second user dedicated screen”

Reply 1-2

Grounds 1 and 6: Horn and Baumgartner

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

131. At the time of the '815 patent, it would have been obvious to a POSITA to combine Horn with Baumgartner by configuring a personal computer with functionality such as a Metadata Filing System (MFS) and associated content management software for managing information including movies, photos and music as taught by Horn to receive, locally store, and manage video information including video on demand content and television programs via a wireless connection to the Internet and associate such information with user profiles as taught by Baumgartner. A POSITA would have been motivated to and capable of combining the disclosures of Horn and Baumgartner to do so.

EX1003 (Bederson Declaration) at ¶ 131;
735 Petition at 22; 777 Petition at 20

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

132. Horn discloses that “[a] primary use of computer information systems is the creation, organization, transmission and storage of *information of a variety of types in the form of content data*, including but not limited to ... *photographs; sounds; [and] music*.” EX1005, 1:34-43.⁸ The patent’s disclosed MFS system “comprises one or more application(s) for organizing all types of text and image information—from word processing documents and spreadsheets; to web pages and multimedia; to illustrations, *images, movies*, and *photographs*; to contacts, notes, and appointments; *to sounds and music; or anything else that is stored and retrieved on a computer*.” EX1005, 12:8-18. One of the benefits of Horn is its utility across all content data types.

EX1003 (Bederson Declaration) at ¶ 132;
735 Petition at 23

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

133. A POSITA would have understood video information was among the content data and information Horn organizes, indexes, and views. Although Horn focuses on photographs and music, Horn explicitly discloses video information, *i.e.*, “movies.” EX1005 at 12:13. Baumgartner is directed toward a system for managing a user’s access to videos, including video-on-demand content such as movies. EX1016, ¶8. Baumgartner discloses embodiments in which a user’s device is a personal computer like Horn’s that obtains video information from a server via the Internet as in Horn. EX1016, ¶¶54-55, 82, and Figs. 1, 5. Horn does not disclose how to implement such an Internet connection, whereas Baumgartner discloses a wireless implementation of an Internet connection to server 36. EX1016, ¶54, Fig. 1. Additionally, Baumgartner explicitly discloses storing video information on the computer’s hard disk drive. EX1016, ¶85. Thus, a POSITA would have looked at Baumgartner to improve Horn, and vice-versa.

EX1003 (Bederson Declaration) at ¶ 133;
735 Petition at 24

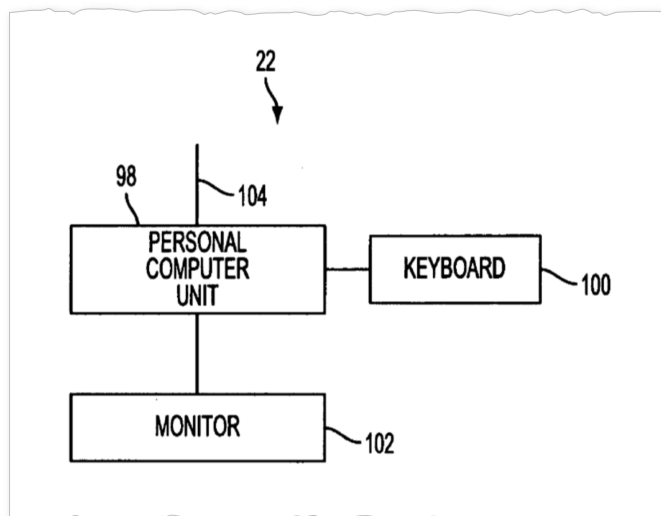
735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

134. A POSITA would have recognized the benefit of managing Baumgartner's video information using the techniques taught in Horn because video information recorded on the user's computer was among the plethora of digital content the user needed organized, indexed, and viewed at the time of Horn and Baumgartner. A POSITA would have understood that the management of Baumgartner's video information enhances the utility of Horn by providing this type of content. The benefit of providing the organization, indexing, and viewing of video information, including the association of user profiles with video information as taught by both Horn and Baumgartner, would have motivated the POSITA to make the combination. Because Horn discloses a connection to the Internet and a LAN but does not provide any implementation details for that connection, a POSITA would similarly look to Baumgartner for additional detail for that implementation.

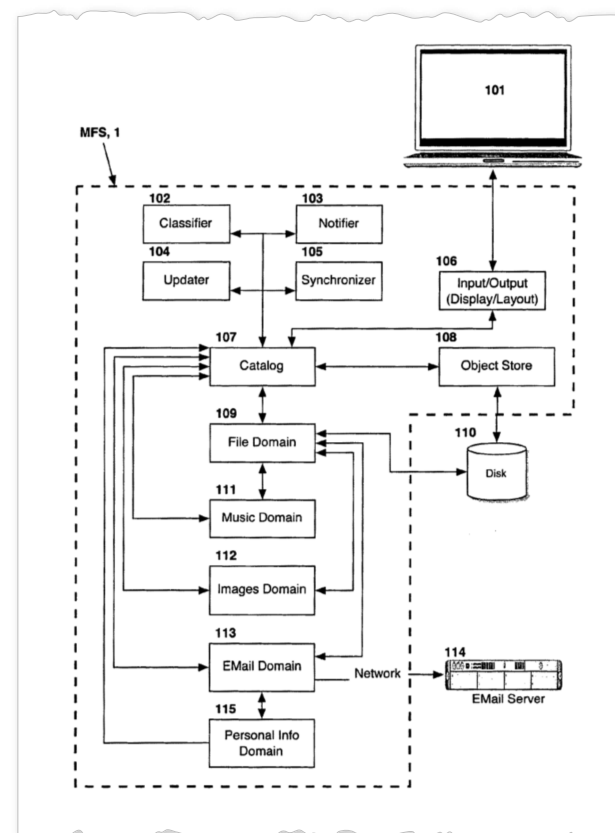
EX1003 (Bederson Declaration) at ¶ 134;
735 Petition at 24

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Horn and Baumgartner both disclose PC-based systems



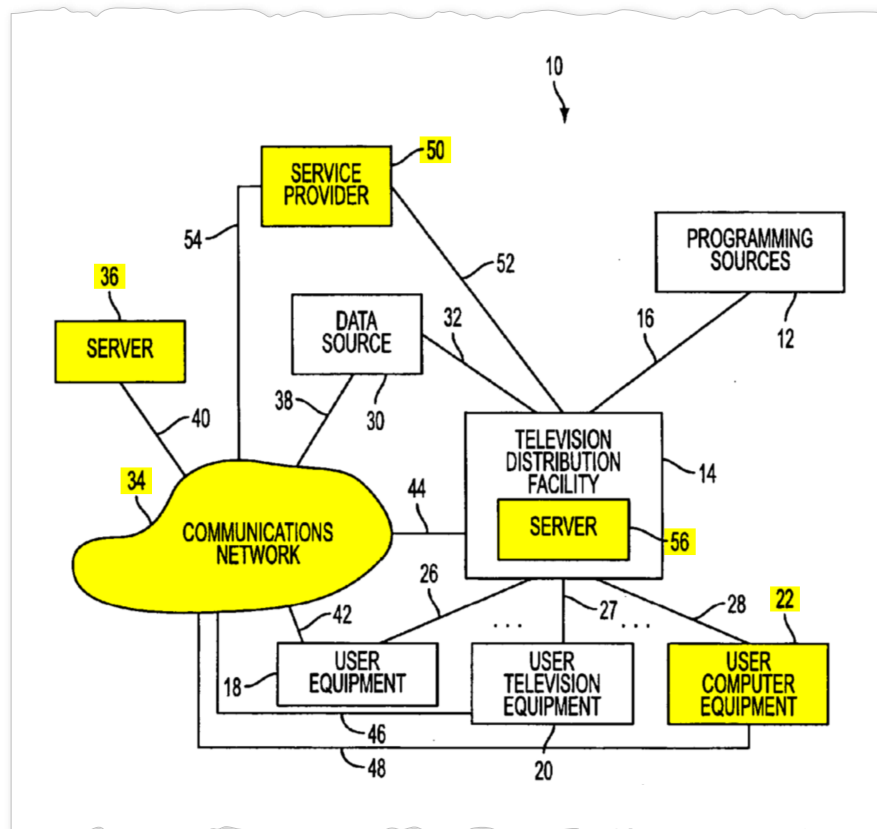
EX1016 (Baumgartner) at Fig. 5; 735 Petition at 27



EX1005 (Horn) at Fig. 1; 735 Reply at 2

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Baumgartner discloses wireless data communication



[0055] Program guide application functions and the functions of other interactive television applications may be supported using server 36 and other servers connected to communications network 34 such as server 56. Interactive television applications may also be supported by servers or other suitable equipment at one or more service providers such as service provider 50. For example, a home shopping service may be supported by a service provider such as service provider 50 that has sales representatives, order fulfillment facilities, account maintenance facilities, and other equipment for supporting interactive home shopping features. A home shopping application that is implemented using the user equipment may be used to access the service provider to provide these features to the user. The user equipment may access service provider 50 via television distribution facility 14 and communications path 52 or via communications network 34 and communications path 54. Communications paths such as paths 52 and 54 may be any suitable paths, such as wired paths, cable paths, fiber-optic paths, satellite paths, **wireless paths**, a combination of such paths, etc.

EX1016 (Baumgartner) at Fig. 1; 735 Petition at 31

EX1016 (Baumgartner) at ¶ 55; 735 Petition at 30

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735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Maxell's Wireless LAN Cost Argument Fails

143. Horn does not expressly disclose that the digital video information is received by the network interface wirelessly. As discussed in limitation [1a], Horn discloses the network interface can be connected to the Internet via a LAN. *E.g.*, EX1005, 6:59-63. A POSITA would have understood that a LAN is often implemented as a wireless LAN, and a POSITA would have found it obvious to implement Horn's LAN with a wireless LAN because they were often cheaper and easier to install than a wired LAN due to **elimination of the need to run wires** to all of the endpoint computers in the network. Additionally, wireless LANs can be more convenient for users.

EX1003 (Bederson Declaration) at ¶ 143;
735 Petition at 29-30

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Maxell's Wireless LAN Cost Argument Fails

Dr. Bederson

Q. Let's take a look at each of those. In your declaration, when you state "A POSITA would have found it obvious to implement Horn's LAN with a wireless LAN because they were often cheaper," you don't cite any evidence to support that claim, do you?

A. **No, I don't. I base that on my experience and knowledge, and that includes the cost of running wires, often requiring tearing out walls and doing significant construction.**

* * *

Q. Did you own your own home in the 2004 timeframe?

A. I did.

Q. Are you generally aware of what it costs to have an electrician or a handyman come to your house to do work in that timeframe?

A. **Generally, yes, I did a fair amount of renovation in that timeframe.**

Q. I think you testified earlier that you had a sense for what it cost to set up a wireless LAN in 2004 and purchase the components for it, correct?

A. **That's right. I was aware in 2004 of a wireless access point and PC wireless card available for \$85.**

Q. What would have been the relevant cost of having a handyman or an electrician come to your home in 2004 and run wires for a wired LAN as opposed to going out and purchasing the components necessary to have a wireless LAN setup, in other words, which one would have been larger?

A. **I would expect that running wires would be much more expensive.**

EX2038 (Bederson) at 44:14-45:2; 100:20-101:21; 735 Reply at 5

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Maxell's Wireless LAN Cost Argument Fails

\$69⁹⁹

Gateway® 802.11b Wireless Broadband Router

- Share your high-speed Internet connection and printer with PCs located anywhere in the house
- Content Filtering lets you decide what your family can browse on the Web
- Integrated 4-port router



\$99⁹⁹

Gateway® 802.11g Wireless Broadband Router

- Take wireless to the next level with 54g technology
- All the great features of 802.11b and 4x the speed

\$49⁹⁹

Gateway® 802.11b Wireless Notebook Card

- Surf from any room in the house and wherever there's a wireless hotspot
- Plugs right into your notebook for simple access to your wireless home network



\$59⁹⁹

Gateway® 802.11g Wireless Notebook Card

- Get the highest performance out of your network with over 4x the speed of 802.11b

EX1071 at 16; 735 Reply at 6

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Maxell's "Horn Limited to Server-Based Systems" Argument Fails

- “*a specialized, server-based computer* running the Metadata Filing System (MFS), not *just a general-purpose or personal computer*”
- “*designed for high-performance, data-intensive computing*”
- “*a robust, server-based solution* that is intended to handle *large volumes of data*”
- “a server-based solution designed for *large-scale data processing*,” emphasizes “handling *vast* amounts of structured data,”
- “align[s] with *enterprise-level data management*, including aggregating data from multiple inputs, performing complex indexing operations, and providing structured data views”
- “supports *high availability, scalability, and efficient handling of extensive data volumes . . .* commonly associated with *enterprise data centers.*”

735 POR at 11-12; 735 Reply at 7

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Maxell's "Horn Limited to Server-Based Systems" Argument Fails

- These passages don't provide support for Maxell's hyperbole

A network interface is coupled to the bus to provide an interface to the data communication network (LAN, WAN, and/or Internet) for exchange of data among the various local network users, site computers, routers, and other computing devices. The system also includes at least one

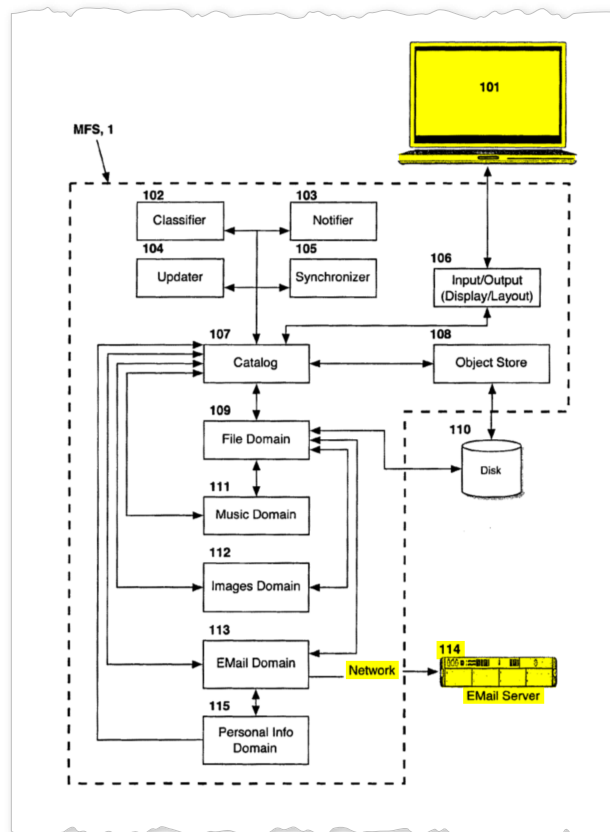
EX1005 (Horn) at 6:59-63; 735 POR at 11; 735 Reply at 8

Accordingly, there is a long felt need in the art to provide a truly open computer system having data structures, input interfaces, displays and operational systems that permits the organization of information, as data objects, in a wide variety of files and databases, which computer system is independent of the source of the information objects, is dynamic and automatic, permitting faster archiving, retrieval and viewing of the information and providing more

EX1005 (Horn) at 3:10-17; 735 POR at 11; 735 Reply at 8

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Maxell's “Horn Limited to Server-Based Systems” Argument Fails



EX1005 (Horn) at Fig. 1; 735 Reply at 9

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Maxell's "Horn Limited to Server-Based Systems" Argument Fails

management. The inventive system is remarkably robust, yet is a relatively small application program that can function with any type of Operating System: Microsoft Windows, Windows NT, Windows 2000, and Windows XP; Apple Macintosh OS 9 and OSX; BSD Unix, HP-UX, Sun Solaris, Linux, and the like. Currently the inventive technology is preferably implemented in its current best mode in a form that is executable on the Apple Macintosh OS9 and OSX operating systems.

EX1005 (Horn) at 37:27-35; 735 Reply at 10

735/777 IPRs Grounds 1 and 6: Motivation to Combine Horn and Baumgartner

Maxell's "Horn Limited to Server-Based Systems" Argument Fails

Q. What was the Apple Macintosh OS9 operating system to the extent you know?

A. What do you mean what was it? It was an operating system that ran on Macintosh.

Q. And what kind of computer was a Macintosh?

A. At that time frame, it was a desktop computer.

EX1072 (Balakrishnan) at 28:15-21; 735 Reply at 10

Grounds 2 and 7: WinTV Is a Publication

WinTV Is a Publication

- US patents inform reasonably diligent POSITA that Hauppauge makes TV tuner cards for PCs

EX1003 (Bederson Declaration) at ¶ 101; 735 Reply at 18

addition to the PC's monitor. The WIN TV-D board, Hauppauge Computer Works, Hauppauge, New York is a DTV receiver board now available, which receives terrestrial broadcast digital television. DTV receiver boards for use in satellite or cable reception are

EX1037 (WO 02/32122) at 2:6-8

a 3.25 inch floppy drive, not shown. The computer 32 also has a video section 42 which includes two video capture/display cards, here WIN-TV cards (here made by Hauppauge Computer Works, Inc., 91 Cabot Court, Hauppauge, N.Y. 11788) WIN-1, WIN-2 cards, and a VGA graphics card

EX1038 (Howell) at 3:51-55

“A POSITA would have been familiar with Hauppauge WinTV products as they were among the early TV tuner products at that time and were one of only two TV tuner products supported by the Windows Media PC with which I was familiar. EX1039, 4. A POSITA would therefore have known to look on the Hauppauge website for relevant information. These products were also mentioned in patents that would have come to the attention of a POSITA looking for information on such products. *E.g.*, EX1037, 2:6-8; EX1038, 3:51-55.”

735 Petition at 6-7; EX1003 at ¶ 101

WinTV Is a Publication

Hauppauge.com – Home page

The Wayback Machine - <https://web.archive.org/web/20030927003737/http://hauppauge.com:80/>

Hauppauge!

EXHIBIT
1065

Bringing TV and broadcast data to your PC

Product Selector
Find your desired product from our extensive product line.

Product Specs
Data sheets and specifications of WinTV, ImpactVCB and our Video Wizard products

Technical Info
Information on technologies used in Hauppauge products including Digital TV, E-Commerce and more!

Software Updates
Product Support and Software Updates (the latest applications and drivers, technical notes plus beta test versions)

iMac Products
Apple Macintosh video products from the Escape Labs division of Hauppauge. Find out about MyTV, MyView, and MyVideo!

Where to Buy
Where to buy Hauppauge products around the world

What's new from Hauppauge?

MediaMVP
music · videos · pictures
MediaMVP: the coolest video product on the Planet! Listen to and watch digital music, pictures and videos on your TV set, from your PC over your home Ethernet LAN!
Available end of Sept. at OfficeMax, Circuit City, Fry's and the Hauppauge webstore for just \$99.99!

WinTV-PVR-usb2
The **WinTV-PVR-usb2** is our newest (and some say best) personal video recorder. It records your TV shows and home videos to disk over USB, and includes ULead DVD MovieFactory 2.1 for making DVDs from your video recordings. In the U.S., it's available exclusively through Circuit City stores.

WinTV-PVR-350
The **WinTV-PVR-350** is our high end PCI board for TV watching and recording. It has a hi-performance hardware MPEG encoder and hardware decoder, for the best system and video performance.

WinTV-HD
If you want U.S. hi-definition TV on your PC screen, look for our **WinTV-HD**. It displays both the U.S. ATSC hi-def standard TV (not digital cable TV) plus analog TV. Includes hi-def monitor output in addition to hi-def TV on your PC screen!

first click



EX1065 at 1; 735 Reply at 19