

Defendant's Invalidation Contentions  
Exhibit E2

**Invalidation of U.S. Patent No. 10,084,991**  
**by**  
**U.S. Patent No. 7,565,680 to Asmussen ("Asmussen")**

The excerpts cited herein are exemplary. For any claim limitation, Defendant may rely on excerpts cited for any other limitation and/or additional excerpts not set forth fully herein to the extent necessary to provide a more comprehensive explanation for a reference's disclosure of a limitation. Where an excerpt refers to or discusses a figure or figure items, that figure and any additional descriptions of that figure should be understood to be incorporated by reference as if set forth fully therein.

Except where specifically noted otherwise, this chart applies the apparent constructions of claim terms as used by Plaintiff in its infringement contentions; such use, however, does not imply that Defendant adopts or agrees with Plaintiff's constructions in any way.

U.S. Patent No. 10,084,991 ("the '991 Patent") claims priority to Japanese Application No. 2008-246232, filed September 25, 2008. For purposes of these invalidity contentions, Defendant applies the Sep. 25, 2008, priority date for the '991 Patent. However, Defendant reserves the right to contest Plaintiff's reliance on the Sep. 25, 2008, priority date, should the priority date become an issue in this proceeding.

U.S. Patent No. 7,565,680 to Asmussen ("*Asmussen*") was filed on June 30, 2000. *Asmussen* therefore qualifies as prior art with regard to the '991 Patent at least under 35 U.S.C. § 102(e) (pre-AIA).

U.S. Patent No. 7,548,255 to Bear, et al. ("*Bear*") was filed on September 30, 2003. *Bear* therefore qualifies as prior art with regard to the '991 Patent at least under 35 U.S.C. § 102(e) (pre-AIA).

U.S. Patent Application Publication No. 2007/0139514 to Marley ("*Marley*") published on June 21, 2007. *Marley* qualifies as prior art with regard to the '991 Patent at least under 35 U.S.C. §§ 102(a) and (b) (pre-AIA).

U.S. Patent Application Publication No. 2003/0041333 to Allen, et al. ("*Allen*") was published on February 27, 2003. *Allen* therefore qualifies as prior art with regard to the '991 Patent at least under 35 U.S.C. §§ 102(a) and (b) (pre-AIA).

U.S. Patent No. 7,046,268 to Saburi ("*Saburi*") was published on May 16, 2006. *Saburi* therefore qualifies as prior art with regard to the '991 Patent at least under 35 U.S.C. §§ 102(a) and (b) (pre-AIA).

Asmussen anticipates or otherwise renders obvious claims 1-5 and 8-12 under 35 U.S.C. §§ 102 and 103(a).

Defendant's Invalidation Contentions  
Exhibit E2

Alternatively, Asmussen in view of Marley renders claims 1 and 8 obvious under 35 U.S.C. § 103(a).

Alternatively, Asmussen in view of Saburi renders claims 1 and 8 obvious under 35 U.S.C. § 103(a).

Alternatively, Asmussen in view of Bear renders claims 1 and 8 obvious under 35 U.S.C. § 103(a).

Alternatively, Asmussen in view of any of Marley, Saburi, and/or Bear renders claims 1 and 8 obvious under 35 U.S.C. § 103(a).

Alternatively, Asmussen in view of Allen renders claims 2-5 and 9-12 obvious under 35 U.S.C. § 103(a).

Alternatively, Asmussen in view of Marley and further in view of Allen renders claims 2-5 and 9-12 obvious under 35 U.S.C. § 103(a).

Alternatively, Asmussen in view of Saburi and further in view of Allen renders claims 2-5 and 9-12 obvious under 35 U.S.C. § 103(a).

Alternatively, Asmussen in view of Bear and further in view of Allen renders claims 2-5 and 9-12 obvious under 35 U.S.C. § 103(a).

Alternatively, Asmussen in view of any of Marley, Saburi, and/or Bear and further in view of Allen renders claims 2-5 and 9-12 obvious under 35 U.S.C. § 103(a).

U.S. Patent No. 10,084,991	Asmussen
<i>Claim 1</i>	
[1(P)] A communication apparatus for transmitting and receiving digital information to and from another communication apparatus, comprising:	<p>To the extent the preamble is limiting, Asmussen discloses a communication apparatus for transmitting and receiving digital information to and from another communication apparatus.</p> <p><i>A set top terminal equipped with a camera and microphone includes the capability to send and receive video calls through a cable television delivery system or other communications networks. In response to detection of the occurrence of a video call event or triggering event, a video program is automatically paused. In response to an incoming video phone call, message, web page, or other video communications information, the system pauses the video program and displays an indication of the occurrence of the</i></p>

Defendant's Invalidity Contentions  
Exhibit E2

	<p><i>communications event. The system also buffers the video program while paused, permitting a user to replay missed portions of it.</i></p> <p><i>Asmussen at Abstract.</i></p> <p><i>The present invention is a set top converter box or terminal for a television program delivery system. More specifically, the present invention is an advanced set top converter box that acts as a terminal in the viewer's home. The set top terminal is a key component of a digital cable television delivery system. The set top terminal is an upgradeable system that provides for the decompression of digital program signals. The preferred set top terminal provides both a menu generation capability as well as a number of advanced features and functional capabilities.</i></p> <p><i>Asmussen at 3:20-30.</i></p> <p><i>Such features include the capability to send and receive video calls through the set top terminal equipped with a camera and microphone. The video call can be communicated through the cable television delivery system or other communications networks.</i></p> <p><i>Asmussen at 4:5-9.</i></p> <p><i>Still other such features include caller identification of video calls and dual display of video programs and video calls, such as picture in picture. The video call functionality can be built into a set top terminal or provided as a hardware upgrade to a set top terminal.</i></p> <p><i>Asmussen at 4:26-30.</i></p> <p><i>Additionally, the set top terminal 220 includes a camera input 666 and a microphone jack 667, by which a camera and microphone, respectively, can be</i></p>
--	---

Defendant's Invalidation Contentions  
Exhibit E2

	<p><i>connected. Alternatively, a camera and microphone can be built into the set top terminal 220.</i></p> <p><i>Asmussen at 16:34-37.</i></p>
<p>[1(a)] a network interface configured to receive first digital information which is received from a contents server which is coupled to the communication apparatus via the network interface</p>	<p>Asmussen discloses a network interface configured to receive first digital information which is received from a contents server which is coupled to the communication apparatus via the network interface.</p> <p><i>In order to achieve the required throughput of video and audio information for the system, digital compression techniques for video are employed. As a result, the set top terminal 220 typically must decompress any digitally compressed program signals that it receives. Methods of decompression are a function of the compression technique used in the program delivery system.</i></p> <p><i>Asmussen at 23:64-24:3; see also id. at 6:48-7:22, Figs. 1-2.</i></p> <p><i>FIG. 11 shows RF signals, depicted at 330, being received at by a data receiver 332 and tuner 603 working in unison. Both of these devices are interfaced with the microprocessor 602, which receives inputs, depicted at 338, from the subscriber, either through the set top terminal's keypad 645 or remote control unit 900. All cable signals intended for reception on the subscriber's TV are accessed by the tuner 603 and subsequently processed by the processing circuitry 340. This processing circuitry 340 typically includes additional components for descrambling, demodulation, volume control and remodulation on a Channel 3 or 4 TV carrier.</i></p> <p><i>Asmussen at 26:1-11.</i></p> <p><i>Any received data includes information regarding channels and programs available for selection. The subscriber may enter a series of commands using the keypad 645 or remote control 900 in order to choose a channel or program. Upon receipt of such commands, the set top terminal's microprocessor 602</i></p>

Defendant's Invalidation Contentions  
Exhibit E2

	<p><i>instructs the tuner 603 to tune to the proper frequency of the channel or program desired and subsequently instructs the processing circuitry 340 to begin descrambling of this channel or program.</i></p> <p><i>Asmussen at 26:21-29.</i></p> <p><i>The set top terminal's microprocessor coordinates all CATV signal reception and also interacts with various upstream data transmission components 604, which have been described above.</i></p> <p><i>Asmussen at 26:60-63.</i></p> <p><i>The microprocessor 602 initiates and coordinates further decompression of the video, graphics and text for each of the program signals. Once these signal parts are decompressed within the set top terminal 220, these components are passed to a video combiner 316. The video combiner correlates and combine the video, graphics and text of the two program signals. The video combiner outputs these two signals for display on the subscriber's television.</i></p> <p><i>Asmussen at 33:26-33.</i></p> <p><i>During this processing, the microprocessor 602 coordinates the demultiplexing of the programming signals.</i></p> <p><i>Asmussen at 36:13-15.</i></p> <p><i>A set top terminal equipped with a camera and microphone includes the capability to send and receive video calls through a cable television delivery system or other communications networks. In response to detection of the occurrence of a video call event or triggering event, a video program is automatically paused. In response to an incoming video phone call, message, web page, or other video communications information, the system pauses the video program and displays an indication of the occurrence of the</i></p>
--	--

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.