No. 2009-1386

United States Court of Appeals for the Federal Circuit

VIZIO, INC. and AMTRAN TECHNOLOGY CO., LTD.,

Appellants,

and

TPV TECHNOLOGY LTD., TPV INTERNATIONAL (USA), INC.,
TOP VICTORY ELECTRONICS (TAIWAN) CO., LTD.,
and ENVISION PERIPHERALS, INC.,

Appellants,

v.

INTERNATIONAL TRADE COMMISSION,

Appellee,

and

FUNAI ELECTRIC CO., LTD. and FUNAI CORP.,

Intervenors.

On appeal from the United States International Trade Commission in Investigation No. 337-TA-617

APPELLANTS' NONCONFIDENTIAL BRIEF

MARK A. SAMUELS
BRIAN M. BERLINER
O'MELVENY & MYERS LLP
400 South Hope Street
Los Angeles, CA 90071-2899
(213) 430-6000

Attorneys for Appellants TPV Technology Ltd., TPV International (USA), Inc., Top Victory Electronics (Taiwan) Co., Ltd., and Envision Peripherals, Inc.

GREGORY A. CASTANIAS
ERIC S. NAMROW
JONES DAY
51 Louisiana Avenue, N.W.
Washington, D.C. 20001-2113
(202) 879-3939

Attorneys for Appellants Vizio, Inc. and AmTran Technology Co., Ltd.

(additional counsel listed on inside cover)

JONATHAN HACKER
O'MELVENY & MYERS LLP
1625 Eye Street, N.W.
Washington, D.C. 20006
(202) 383-5300

Attorneys for Appellants TPV Technology Ltd., TPV International (USA), Inc., Top Victory Electronics (Taiwan) Co., Ltd., and Envision Peripherals, Inc.

SASHA MAYERGOYZ
JONES DAY
77 West Wacker
Chicago, IL 60601-1692
(312) 782-3939

Attorneys for Appellants Vizio, Inc. and AmTran Technology Co., Ltd.

CERTIFICATE OF INTEREST

Counsel for appellants Vizio, Inc. and AmTran Technology Co., Ltd., certify the following in accordance with Fed. R. App. P. 26.1 and Fed. Cir. R. 47.4(a):

The full name of every party represented by me is:

Vizio, Inc.; AmTran Technology Co., Ltd.

The names of the real parties in interest, if the parties named in the caption are not the real parties in interest, represented by me are:

The parties named in the caption are the real parties in interest.

All parent corporations and any publicly held companies that own ten percent or more of the stock of the parties or amicus curiae represented by me are:

Vizio, Inc. has no parent corporations. AmTran Technology Co., Ltd. (a Taiwanese publicly traded company) owns approximately 20% of Vizio, Inc.

AmTran Technology Co., Ltd. has no parent corporation, nor does any publicly-held company own 10% or more of its stock.

The name of all law firms and the partners and associates that have appeared for the parties now represented by me in the lower tribunal or are appearing in this Court are:

Jones Day: Gregory A. Castanias; Sasha Mayergoyz; Eric S. Namrow; H. Stephen Harris, Jr.; Geoffrey D. Oliver; Garfield B. Simms; Vishal V. Khatri; Ric Macchiaroli; David B. Cochran; Paul C. Lin

Sidley Austin LLP: Edward G. Poplawski; Samuel N. Tiu; Jim S. Zeng; Peter H. Kang; Georgia K. Van Zanten; Duy D. Nguyen; Brian Koo; Theodore W. Chandler

CERTIFICATE OF INTEREST

Counsel for appellants TPV Technology Ltd., TPV International (USA), Inc., Top Victory Electronics (Taiwan) Co., Ltd., and Envision Peripherals, Inc., certify the following in accordance with Fed. R. App. P. 26.1 and Fed. Cir. R. 47.4(a):

The full name of every party represented by me is:

> TPV Technology Ltd. ; TPV International (USA), Inc.; Top Victory Electronics (Taiwan) Co., Ltd.; and Envision Peripherals, Inc.

The names of the real parties in interest, if the parties named in the caption are not the real parties in interest, represented by me are:

> The parties named in the caption are the real parties in interest.

All parent corporations and any publicly held companies that own ten percent or more of the stock of the parties or amicus curiae represented by me are:

> Philips Electronic Hong Kong Ltd. and China Great Wall Computer Shenzhen Co. Ltd. each have an ownership interest of 10% or more in Appellant TPV Technology Ltd. No other entity has an ownership interest of 10% or more in TPV Technology Ltd.
>
> Top Victory Investments Ltd., a company organized under the laws of Hong Kong, has an ownership interest of 10% or more in Appellant TPV International (USA), Inc. No other entity has an ownership interest of 10% or more in TPV International (USA), Inc.
>
> Top Victory Investments Ltd. has an ownership interest of 10% or more in Appellant Top Victory Electronics (Taiwan) Co., Ltd. No other entity has an ownership interest of 10% or more in Top Victory Electronics (Taiwan) Co., Ltd.
>
> Top Victory Investments Ltd. and Peaks Investment Co. LLC each have an ownership interest of 10% or more in Appellant Envision Peripherals, Inc. No other entity owns 10% or more of Envision Peripherals, Inc.

The name of all law firms and the partners and associates that have appeared for the parties now represented by me in the lower tribunal or are appearing in this Court are:

O’Melveny & Myers LLP: Mark Samuels; Stephen Akerley; Ryan Yagura; Brian Berliner; Nicholas Whilt; Vision Winter; Jonathan Hacker; Irv Gornstein

Adducci Mastriani & Schaumberg LLP: V. James Adducci II; Sarah Hamblin; David Hollander

TABLE OF CONTENTS

Page

Pursuant to Federal Circuit Rule 28(d)(1)(B), material subject to a November 16, 2007 protective order entered by the International Trade Commission has been redacted from this brief. Confidential material relating to Funai's licensing information has been omitted from pages 61-62. Confidential material relating to the identity of Appellants' suppliers has been omitted from pages xiii, 20, 36, and 37. Finally, confidential material relating to source code of Appellants' products has been omitted from pages v, 1, 2, 20, 33-38, and 40.

TABLE OF CONTENTS
(continued)

Page

TABLE OF CONTENTS
(continued)

Page

TABLE OF CONTENTS
(continued)

Page

TABLE OF AUTHORITIES

Page

CASES

STATUTES

OTHER AUTHORITIES

TABLE OF ABBREVIATIONS

Parties

Appellants	Vizio, Inc.; AmTran Technology Co., Ltd.; TPV Technology Ltd. ; TPV International (USA), Inc.; Top Victory Electronics (Taiwan) Co., Ltd.; and Envision Peripherals, Inc., collectively
ITC or Commission	Appellee International Trade Commission
Funai	Intervenors Funai Electric Co., Ltd. and Funai Corporation

Defined Terms

The ’074 patent	U.S. Patent No. 6,115,074
The ’369 patent	U.S. Patent No. 5,329,369
A___	Joint Appendix. References in the form A10:15-20 are, in this example, to lines 15 to 20 on page 10 of the Joint Appendix. References in the form A10:5:12-25 are, here, to either column 5 or page 5, lines 12 to 25, on page 10 of the Joint Appendix, where a document has numbered columns and lines or multiple pages of a transcript condensed to a single page.
ALJ	Administrative Law Judge Carl C. Charneski
ATSC	American Television System Committee
CIT	Channel Information Table
DRAM	Dynamic Random Access Memory
DTV	Digital Television
Eyer	U.S. Patent No. 5,982,411

Examiner	United States Patent and Trademark Examiner who examined the application for the '074 patent
FD	Final Determination, issued April 10, 2009
ID	Initial Determination, issued November 17, 2008
ITC or Commission	International Trade Commission
legacy products	Appellants' products, which use both the Program Map Table (PMT) and Virtual Channel Table (VCT) to identify packet identifiers (PIDs) for a selected program
[Mediatek]	[Mediatek Incorporated]
MPEG	Motion Pictures Expert Group
PCR	Program Clock Reference
PID	Packet identifier
PMT	Program Map Table
PTC	Physical Transmission Channel
PTO	United States Patent and Trademark Office
SC	Sub-channels
SLD	Service Location Descriptor
VCT	Virtual Channel Table
Wasilewski	U.S. Patent No. 5,600,378
work-around products	Appellants' products using only the PMT to identify PIDs for a selected program
[ ]	[ ]

All emphasis in this Appellants' Brief is added unless otherwise indicated.

STATEMENT OF RELATED CASES

There have not been any appeals in or from this Investigation that were previously before this Court or any other appellate court.

Funai Electric Co., Ltd. filed three separate district court actions asserting U.S. Patent Nos. 6,115,074 and 5,329,369 (the "'074 patent" and "'369 patent," respectively). These actions are: (1) *Funai Electric Co., Ltd. v. Proview International Holdings Ltd., et al.*, Case No. CV 06-5355 AHM(RCx) (C.D. Cal.); (2) *Funai Electric Co., Ltd. v. TPV Technology Ltd., et al.*, Case No. CV 07-0254 AHM(RCx) (C.D. Cal.); and (3) *Funai Electric Co., Ltd. v. V, Inc., et al.*, Case No. SACV 07-0274 (C.D. Cal.). All three cases were consolidated before Judge A. Howard Matz and have been stayed pursuant to 28 U.S.C. § 1659 since November 21, 2007.

Additionally, on March 14, 2008, the United States Patent and Trademark Office ("PTO") granted a Request for *Ex Parte* Reexamination of the '074 patent. On March 11, 2009, the PTO issued a Final Office Action, rejecting claims 1-24 of the '074 patent as unpatentable due to anticipation and obviousness. On July 22, 2009, the PTO issued an Advisory Action confirming the rejection of claims 1-24 and requiring Funai to appeal the Final Office Action, or the examination of those claims will be terminated and the claims canceled.

Appellants are not aware of any other related cases.

JURISDICTIONAL STATEMENT

The ITC initiated this Investigation based on a complaint filed by Funai Electric Co., Ltd. and Funai Corporation (collectively "Funai"), alleging violations of Section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337. The Commission had jurisdiction under 19 U.S.C. § 1337(a)(1)(B), (b), & (c). On April 10, 2009, the Commission found a violation of Section 337. That determination became final on June 10, 2009, at the conclusion of the 60-day Presidential review period. *See* 19 U.S.C. § 1337(j)(4). Appellants timely filed their notice of appeal on June 10, 2009. *See* 19 U.S.C. § 1337(c). This Court has jurisdiction under 28 U.S.C. § 1295(a)(6).

STATEMENT OF THE ISSUES

1. Where the patentees' original claims were rejected based on prior art that utilized a program map table ("PMT") to separate components of a datastream, and the patentees then (a) amended their claims to remove all references to the PMT and (b) argued that "the PMT is **NOT** needed" in the claimed inventions, did the ITC err by nonetheless construing the claims to read on products that acquire and use the PMT?

2. Did the ALJ err in finding that Appellants' work-around products are infringing, despite the undisputed fact that such products [

]

3. Did the ALJ err by primarily relying on extrinsic evidence to construe the term "channel map information" as requiring program_number, PCR_PID, and stream_type data, when the intrinsic evidence demonstrates that such data are simply "exampl[es]" of data that may be part of the "channel map information"?

4. Did the ALJ err in determining that the asserted claims are not anticipated by the A/55 standard, and would not have been obvious in view of the combination of the A/55 standard and the Eyer patent?

STATEMENT OF THE CASE

A. Preliminary Statement

This case involves digital-television technology. More specifically, it involves the technology that digital televisions use for allowing a viewer to change channels to find a selected program. In the digital-television era, television networks broadcast programs by transmitting streams of digitized data, which are organized in packets. The datastream for a given program includes packets containing audio and video information. With the advent of digital programming, a television may simultaneously receive hundreds of datastreams corresponding to hundreds of different programs on hundreds of different channels.

At a user's command, a digital television must sort through all the packetized datastreams and identify the packets necessary for displaying the selected program. The packets themselves, however, do not instruct the digital television which packets are necessary for displaying the selected program. As a result, broadcasters also transmit data that identifies and organizes—or "maps"—the program packets. Broadcasters send the mapping data in a transmission format and such data is scattered throughout the datastream. Digital televisions, in turn, may acquire and reformat the mapping data in order to assemble tables of information for finding a user's selected program. When a user changes the channel by selecting a new program, the digital television uses an assembled table to find and organize the correct program packets. Examples of mapping data that are transmitted and may subsequently be reformatted and assembled into tables are the Program Map Table ("PMT"), which maintains a record for identifying particular packets with corresponding programs, and the Virtual Channel Table ("VCT"), which provides a replicated version of the PMT and additional channel data, such as channel numbering.

However, the process of finding the transmitted mapping data, reformatting that data, assembling the reformatted data into a table, identifying the correct program packets, and organizing those packets may result in a delay—called "channel latency"—before the digital television can display the new program.

This lawsuit arises from Funai's assertion of the '074 patent, which sought to solve the channel-latency problem by avoiding the acquisition and use of the PMT, and instead relying on channel map information in the VCT to locate the user's selected program.

During the Investigation, the ALJ's misapplication of fundamental claim-construction principles led to an erroneous construction that, in turn, infected his infringement and invalidity analyses. Failing to give proper effect to the patentees' narrowing amendment and disavowal during prosecution that "the PMT is **NOT** needed" in the claimed invention, and that the claimed invention operates "without acquiring and using the Program Map Table (PMT) information" (A41376-77), the ALJ nonetheless construed the claims as covering use of the PMT, and thereby found Appellants' products to infringe.

Furthermore, by relying heavily on extrinsic evidence and expert testimony (in lieu of the intrinsic record) as the primary basis for construing the term "channel map information," the ALJ improperly narrowed the claims in that respect, contrary to their language and the written description, leading to a determination that the asserted claims are not invalid.

These and the other errors outlined below should lead this Court to reverse the ITC's judgment.

B. Procedural History

On October 15, 2007, Funai filed a complaint alleging that fourteen respondents violated 19 U.S.C. § 1337 through importation or sale of certain digital televisions that infringed claims 1, 4, 5, 8, 9, and 23 of the '074 patent, and claims 1-3, 5, 7, 10-13, 15, and 19-29 of the '369 patent. On November 15, 2007, the ITC published its Notice of Investigation. *See* 72 Fed. Reg. 64240 (2007).

The Investigation was subsequently terminated with respect to certain respondents. (A1082.) During the course of the Investigation, Funai also withdrew its assertion of claims 4, 8, and 9 of the '074 patent and claims 2, 5, 10-13, 15, 20, and 22-29 of the '369 patent. (*Id.*) Thus, only claims 1, 5, and 23 of the '074 patent and claims 1, 3, 7, 19, and 21 of the '369 patent remained at issue.

The ALJ held an evidentiary hearing in August 2008, and issued his Initial Determination on November 17, 2008. (A1082-83.) The ALJ found that Appellants infringed claims 1, 5, and 23 of the '074 patent, and that those claims are not invalid. (A662.) The ALJ found no violation with respect to the '369 patent, determining that the asserted claims are invalid. (*Id.*) On November 25, 2008, the ALJ issued a recommended determination on remedy and bonding, finding that "the products found to infringe should be subject to a limited exclusion order." (A873.)

On February 11, 2009, the ITC determined to review the ALJ's findings that: (1) Appellants directly infringe claim 23 of the '074 patent through certain testing activities in the United States; and (2) Appellants induced infringement of claim 23 of the '074 patent. (A1083.) On April 10, 2009, the ITC issued a Final Determination, in which it overturned the ALJ's finding of direct infringement via testing as to the TPV and Proview respondents, but otherwise affirmed the ALJ's findings of infringement and non-invalidity. (A1084-90.) The ITC accepted the ALJ's recommendations of a limited exclusion order and cease-and-desist orders. (A1099.)

The Presidential Review period expired on June 10, 2009. Appellants timely filed their notice of appeal on that date. This appeal involves only the '074 patent, as Funai has not appealed the determinations adverse to it with respect to the '369 patent, and the time for doing so has expired. *See Allied Corp. v. International Trade Comm'n*, 782 F.2d 982, 984 (Fed. Cir. 1986).

STATEMENT OF THE FACTS

A. Background Of The Technology

Historically, television programs were broadcast by transmitting analog signals. Analog transmission provided a single program for a single television channel. For example, at 6 p.m., channel 4 in the Washington, D.C. area provided the local NBC news program. Each television channel was allocated a 6 MHz

frequency range. (A28434:2-17.) Thus, channel 2 corresponds to a 54-60 MHz frequency band, channel 3 a 60-66 MHz band, channel 4 a 66-72 MHz band, and so forth. (*Id.*)

The development of digital video processing technology enabled television signals to be compressed to fit into a much narrower frequency range. (A1558:1:24-30.) As a result, multiple digital signals corresponding to different programs can now be carried within the same 6 MHz frequency band. (A11581:30-38.) For example, while channel 4 could only carry a single NBC program in analog transmission, the frequency band for channel 4 in digital transmission can now carry multiple programming. (*Id.*) Thus, a single frequency band may now include multiple sub-channels carrying different programs (*e.g.*, sub-channel 4-0 corresponding to NBC, sub-channel 4-1 corresponding to MSNBC, sub-channel 4-2 corresponding to CNBC, etc.). (*Id.*)

This development nonetheless created a new challenge. Televisions that receive a digital signal must be able to separate the various programs and correlate a selected program with a particular channel (or sub-channel). (*Id.*) Because digital signals are densely packed into a single frequency band, separating the digital transmission may increase the time delay between a user selecting a desired program on a particular channel and the appearance of that program on the television. (A1558:1:41-59.) This delay is called "channel latency."

To address channel latency (among other issues related to digital television transmission), various organizations have promulgated standards for transmitting, receiving, and decoding digital signals. These organizations include the Motion Picture Expert Group, which developed various MPEG standards. (A28434:19-A28435:14.) Another organization, the Advanced Television System Committee ("ATSC"), developed various standards such as the A/55 standard ("Program Guide For Digital Television"), the A/56 standard ("System Information For Digital Television"), and the A/65 standard ("Program and System Information Protocol"). (A28440:15-22; A36980; A35912; A36409.)

B. The MPEG-2 Standard

The MPEG-2 standard is generally used by digital cable and satellite providers to transmit digital video signals. A packet is the basic unit of data transmission in MPEG-2. (A28838:19-23.) Each packet carries a particular type of data, such as audio or video, corresponding to a specific program for a specific channel. (A28435:24-A28436:9.) Each packet includes a packet identifier, or PID, for identifying the type of data carried by the packet. (*Id.*) Before a program can be transmitted, packets having the same PID are encoded in a transmission format and formed into elementary streams. (A28435:15-A28436:25.) Each elementary stream carries one type of data (*e.g.*, audio or video) corresponding to the specific program. (*Id.*)

Elementary streams from different programs may be "multiplexed," or combined, to form a single transport stream. (A28437:1-12.) A transport stream also includes program-specific information consisting of various tables with information about the transmitted programs. (A28437:13-21.) Digital televisions access these tables to assist with navigating a channel-changing procedure. One such table is the Program Map Table, which maintains a record of the PIDs for elementary streams corresponding to each transmitted program. (A28437:13-21; A28438:15-24.) A broadcaster sends the PMT data as part of the transport stream and the data is scattered throughout a broadcaster's frequency band.

Following transmission, a digital television receiver decodes the transport stream and "de-multiplexes," or separates, that stream into various elementary streams. (A28438:25-A28439:13.) For example, if a transport stream carries programs corresponding to three different channels, a digital television receiver can locate a user's selected program by examining the PMT to find the specific location of the selected program's audio and video components.

C. The A/55 Standard—"Program Guide For Digital Television"

As noted, the MPEG-2 standard is used to transmit digital audio and video signals, but its elementary streams alone are not suitable for broadcast television, which involves a digital television simultaneously receiving many different transmissions from multiple broadcasters (*e.g.,* ABC, NBC, ESPN, etc.).

Accordingly, the ATSC in 1996 published a standard specific to television broadcasters, known as the A/55 standard. The A/55 standard relied on the MPEG-2 elementary video and audio streams, but added another layer of information to facilitate program identification. (A36986.) The A/55 standard discloses a system that provides "all the data necessary to tune channels and display available program information." (A36987.)

The A/55 standard describes a Master Program Guide that provides "all of the current programming information and reference information." (A36990.) The Master Program Guide includes various tables of information, such as the Virtual Channel Table ("VCT"), for locating a selected program.[1] (*Id.*) The information includes a PID (packet identifier) list. (*Id.*) PIDs are "unique packet identifiers identifying each transport packet belonging to an elementary stream within an MPEG transport stream." (A36995.)

The Master Program Guide also includes a table providing a time_base_PID containing program clock reference ("PCR") information for ensuring synchronization of audio and video data for programs corresponding to a channel. (A36999.) The Master Program Guide further includes a table containing a channel_number which "corresponds to the program number in the MPEG system

[1] Specifically, the Master Program Guide includes: (1) Master Guide Table; (2) Additional Guide Data Table; (3) Channel Information Table, also known as the Virtual Channel Table; and (4) Event Information Table. (A36990.)

PSI [program specific information] sections." (A37006.) In addition, the Master Program Guide contains stream_type data in the form of an "SType" integer that describes the "type of service," such as audio or video, "provided by the [ ] data stream." (A37008.)

D. The '074 Patent

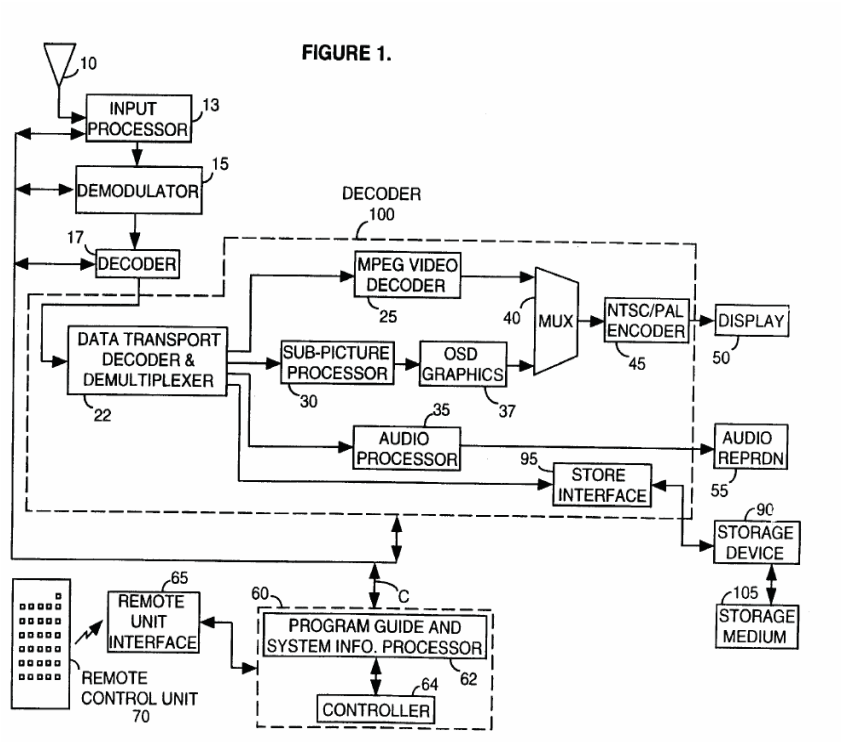
1. The Asserted Claims And Written Description

The '074 patent relates to locating a user's selected program in a digital transmission through "the formation of Program Guides, system information and program specific information for MPEG compatible processing." (A1558:1:11-13.) Asserted claim 23 recites:

> A method for decoding MPEG compatible packetized program information containing program map information to provide decoded program data, comprising the steps of:
>
> identifying channel map information conveyed within said packetized program information; and
>
> assembling said identified information to form a channel map ***suitable for use in*** identifying said individual packetized datastreams constituting said program, wherein
>
> said channel map information replicates information conveyed in said MPEG compatible program map information and said replicated information associates packet identifiers with individual packetized datastreams that constitute a program transmitted on a broadcast channel.

(A1564:14:9-25.) Asserted claim 1 is an apparatus claim drafted in means-plus-function format and is similar to claim 23, except for the omission of the phrase "suitable for use in." (A1563:11:32-34) (reciting "means for assembling said identified information to form a channel map for identifying said individual packetized datastreams").

With reference to Figure 1, the '074 patent explains how the disclosed system locates a user's selected program from the transport stream. (A1558:2:19-21.)



The '074 patent describes a processor 60 that receives data in a transmission format and "parses, collates, and assembles this information into hierarchically arranged tables." (A1559:3:55-59; A1560:5:52-55.) The resulting tables, which

include a Master Guide Table and a Channel Information Table, are "in a format for use in conveying program specific information" to identify the user's selected program. (A1558:2:21-35; A:1560:5:29-36.)

In discussing the various figures which illustrate the data that may be included in the Master Guide Table and Channel Information Table ("CIT"), the '074 patent states that such figures "exemplif[y]" possible data formats:

> The program specific information including MGT, CIT, EIT, and ETT data and associated descriptors acquired and collated by processor 60 incorporates advantageous features ***exemplified in the data formats presented in FIGS. 2-9.*** These features facilitate the identification, acquisition, assembly and decoding of program channel content and associated program guide data by decoder 100 (FIG. 1).

(A1560:5:62-65; *see also* A1560:6:11-14 (noting that CIT is "exemplified in FIG 3").)

The '074 patent explains that "the CIT may be deemed a virtual channel table." (A1561:7:7-8.) Contained within the Channel Information Table is a data structure called the Service Location Descriptor ("SLD") from which the system "determines program map information." (A1561:7:21-23.) Regarding Figure 4, which illustrates the SLD "format for use in conveying program specific information incorporating program map information" (A1558:2:29-32), the patent depicts "example[s]" of data that may be part of the SLD:

> The SLD program map information ***is exemplified by the data format of FIG. 4.*** * * * * In addition, the SLD program map information, in conjunction with the CIT, maps the selected sub-channel SC to a program number 405, a PCR (Program Clock Reference) identifier 410, a language code indicator 425, and a stream type identifier 415 identifying a stream as video, audio, control, auxiliary or private information, ***for example***.

(A1561:7:23-35.)

The ’074 patent further explains that with the proliferation of programs and channels made possible by digital television, there is a concomitant increase in channel latency:

> [T]he increase in the quantity of broadcast channels may increase the difficulty of tuning and lengthen the time required to acquire a selected program channel. Further, as the quantity of channels increases so does the quantity of ancillary program specific information required in decoding the transmitted program data.

(A1558:1:46-52.) The increase in transmitted information “places an additional burden on available transmission bandwidth and receiver decoding and storage resources.” (A1558:1:57-59.) The patent states that “these problems and derivative problems are addressed by a system according to the present invention.” (A1558:2:1-2.)

The ’074 patent’s proposed solution for channel latency is a system that operates “without acquiring and using the Program Map Table.” (A1561:7:36-53.) Because the PMT may be scattered throughout a frequency band, the ’074 patent

teaches saving the time required to receive and access the PMT itself and instead relying on a replicated copy of the information in the PMT. (A1558:2:14-16; A1560:7:36-53.) To do this, the '074 patent explains that the "SLD program map information replicates information ***already present within the Program Map Table (PMT)*** segment" of the MPEG transport stream. (A1561:7:36-38.) By including the Service Location Descriptor as part of the Channel Information Table, "the time required by decoder 100 to identify and acquire a program being transmitted on selected sub-channel SC is advantageously reduced." (A1561:7:39-42.)

The '074 patent further explains that:

> [T]he CIT and SLD provide formatted and linked information sufficient to ***enable processor 60 to directly configure and tune the system of FIG. 1 to receive the selected sub-channel SC***. Specifically, the CIT and SLD ***directly associate*** individual first and second sub-channel identification numbers with the PIDs for identifying the datastreams that constitute a program being conveyed on this sub-channel.

(A1561:7:42-49.) This achieves a reduction in channel latency because the Channel Information Table and Service Location Descriptor provide information contained in the PMT, which "enables processor 60 to configure the system in FIG. 1 to receive the selected sub-channel SC ***without acquiring and using the Program Map Table (PMT) information in the MPEG compatible transport stream input to decoder 100***." (A1561:7:49-53.)

2. The Prosecution History

The patentees filed a provisional application for the '074 patent on July 10, 1997, and then converted the provisional to a regular application on April 9, 1998. The patentees' originally-filed claim 23 recited:

> A method for decoding MPEG compatible packetized program information containing ***program map table*** information to provide decoded program data, comprising the steps of:
>
> identifying channel map information conveyed within said packetized program information, said channel map information associating a broadcast channel with packet identifiers used to identify individual packetized datastreams that constitute a program transmitted on said broadcast channel; and
>
> assembling said identified information to form a channel map suitable for use in identifying said individual packetized datastreams constituting said program, wherein
>
> said channel map information replicates information conveyed in said MPEG compatible ***program map table*** information.

(A40980.) Originally-filed claim 1 was similar to claim 23, with the exception that claim 1 was written in means-plus-function format and did not recite the phrase "suitable for use in." (A40976.)

In the First Office Action, the Examiner rejected originally-filed claims 1, 2, 4-10, 13, 15-17, and 19-24 as anticipated by U.S. Patent No. 5,600,378

("Wasilewski"). (A41325.) The Examiner explained that the channel-mapping system of Wasilewski includes:

> [A] decoder 10 (Fig. 1) which receives a packet stream having MPEG-2 formatted data, including channel guide data and program guide data (note elements 34 and 40). System processor 14, with component demuxer 16, identify channel map data and program map data which are extracted from the incoming data stream, whereby the channel map data indicates associated broadcast channels using packet IDs which in turn identify individual data streams constituting the selected A/V programs. ***The channel map data replicates data conveyed in the MPEG program map table (note element 38) to indicate to the viewer which programs correspond which channels***.

(*Id.*)

In response to the Wasilewski rejection, the patentees amended the claims to remove the reference to a "program map table." (A41371-74.) In addition, with regard to claim 23, the patentees deleted the following language from the first limitation—"said channel map information associating a broadcast channel with packet identifiers used to identify individual packetized datastreams that constitute a program transmitted on said broadcast channel"—and inserted the following language at the end of the "wherein" limitation:

> said ***replicated information associates packet identifiers with individual packetized datastreams*** that constitute a program transmitted on a broadcast channel.

(A41374.)[2] The patentees stated that support for the "feature" described by the newly added claim language is "found in the existing claims and in the Application at page 12 line 24 and in other places." (A41375.) This citation to "page 12 line 24" of the application corresponds to the passage starting at column 7, line 39 in the issued patent. (A1561:7:39-57.)

In addition to the claim amendments, the patentees submitted remarks in which they urged patentability of the amended claims over Wasilewski. (A41375-77.) The patentees argued that in Wasilewski, the "PMT 40 … is **needed** to demultiplex the service components of the selected program." (A41376 (emphasis in original).) The patentees then distinguished their claimed invention by arguing that, "[i]n contrast" to Wasilewski, "the PMT is **NOT** needed" because their invention replicates such information:

> ***In contrast***, the channel map of ***the claim 1 system replicates*** the "packet identifiers used to identify individual packetized datastreams that constitute a program" in a "channel map" and ***consequently in the claim 1 system the PMT is*** **NOT** ***needed*** to demultiplex program components ***since the 'channel map' contains the required information.***

(*Id*. (capitalization in original).) The patentees went on to tout the advantage of not using the PMT:

[2] The patentees made similar amendments to claim 1. (A41372.)

> By replicating program map information in a "channel map", the time required by the decoder to identify and acquire a program being transmitted is advantageously reduced. This is because the channel map, together with the replicated information, enables a decoder to directly configure and tune to receive a selected channel desired by a User ***without acquiring and using the Program Map Table (PMT) information*** in the MPEG compatible stream input to the decoder.

(A41377.) The patentees further noted that "[n]either the claimed features, nor these specific advantages, are recognized or suggested in Wasilewski." (*Id.*) The patentees also made clear that amended independent claim 23 is "considered to be patentable for the reasons given in connection with amended claim 1." (*Id.*)

Following these amendments and arguments, the Examiner allowed the amended claims. The '074 patent issued on September 5, 2000.

E. Funai's Complaint And The Accused Products

On October 15, 2007, Funai filed its complaint alleging that Appellants' digital televisions infringed various claims of the '074 and '369 patents. When it filed the complaint, Funai itself understood that the claims of the '074 patent exclude use of the PMT—the infringement charts accompanying Funai's complaint specifically contended that the accused products "assembl[e] information from the VCT data [*i.e.*, CIT] and ***not from*** the information contained in ***the PMT***." (A4373 at 9, 18.)

Funai's infringement claim focuses exclusively on a specific chip or chipset that Appellants purchase from third parties, such as [MediaTek Inc.] and [Zoran Corporation]. (A516; A28491:12-A28492:17; A28724:15-A28725:10; 28776:1-23.) The accused products that were the subject of this Investigation fall into two categories:

- **Legacy products**—digital televisions that Appellants were importing when Funai filed its complaint but subsequently stopped importing during the course of discovery. These products [ ]. (A31744:17-21.)
- **Work-around products**—digital televisions that Appellants started importing during discovery. These products [ ]. (A28919:1-A28920:15; A28923:16-22; A31744:1-A31745:3.)

After the finding of infringement, the issuance of a limited exclusion order, and the expiration of the Presidential review period, this appeal followed.

STANDARD OF REVIEW

This Court reviews the ALJ's legal determinations, such as claim construction and the ultimate conclusion of obviousness, *de novo*. *See, e.g., Alloc, Inc. v. International Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003). This Court reviews the ALJ's factual findings regarding infringement, anticipation, and obviousness for substantial evidence. *See id.*

SUMMARY OF THE ARGUMENT

1. The patentees disavowed use of the PMT in order to overcome the rejection based on Wasilewski and obtain issuance. Thus, the ALJ improperly construed the term "identifying channel map information … and assembling said identified information" as encompassing use of the PMT. During prosecution of the '074 patent, the patentees overcame an anticipation rejection by arguing that "[i]n contrast [to Wasilewski], the channel map of the claim 1 system ***replicates the 'packet identifiers*** used to identify individual packetized datastreams that constitute a program' in a 'channel map' ***and consequently in the claim 1 system the PMT is*** **NOT** ***needed.***" (A41376.) The patentees then sealed this disclaimer by further representing that, unlike Wasilewski, the claimed invention operates "***without*** acquiring and using the Program Map Table (PMT) information in the MPEG compatible stream input to the decoder." (A41377.) To read these statements as anything other than a disavowal of the PMT would not avoid the prior art that the patentees sought to overcome and would, perplexingly, yield the conclusion that the patentees had *broadened*, rather than narrowed, their claims to overcome the rejection. Thus, properly construed, the claims of the '074 patent cannot cover acquisition and use of the PMT, which should lead to a finding of non-infringement.

2. When the claims are properly construed to exclude use of the PMT, it is undisputed that Appellants' products do not infringe. Appellants' work-around products also do not infringe for the separate reason that these products [store the VCT data in a transmission format that is neither used for nor "suitable for use in identifying said individual packetized datastreams constituting said program," as required by the claims]. In finding otherwise, the ALJ relied on inapposite evidence dealing with suitability for *transmission*, not suitability for *identification*, essentially reading the "identifying" limitation out of the claims.

3. By focusing on extrinsic evidence and expert testimony rather than the claim language and the written description, the ALJ erroneously construed "channel map information" as necessarily requiring program_number, PCR_PID, and stream_type data, when the specification calls those types of data (which appear in the Figure 4 embodiment only) "example[s]" of data that may be part of the "channel map information," and the claim language cannot be read to require each of those data types. Properly construed, the claims are not limited to these exemplars, which should lead to a finding of invalidity.

4. When the term "channel map information" is properly construed, the claims are undeniably anticipated by the A/55 standard. Further, even under the ALJ's construction, the record evidence, including the A/55 reference and the testimony of Funai's own expert, establishes that the A/55 standard discloses the

program_number and PCR_PID data. Moreover, the combination of the A/55 standard and the Eyer patent render the asserted claims invalid under Section 103.

ARGUMENT

I. THE INTRINSIC EVIDENCE ESTABLISHES THAT THE LIMITATION "IDENTIFYING CHANNEL MAP INFORMATION … AND ASSEMBLING SAID IDENTIFIED INFORMATION" IS PROPERLY CONSTRUED TO EXCLUDE ACQUISITION AND USE OF THE PMT

Initially, Funai's claims were rejected over Wasilewski, which the examiner viewed as anticipating the channel mapping system claimed in the '074 patent. (A41325.) In response, Funai amended its claims and offered arguments meant to distinguish its claimed invention from Wasilewski, urging, most notably: (1) "in the claim 1 system the PMT is **NOT** needed to demultiplex program components" (A41376 (emphasis in original)),[3] and (2) the claimed invention operates "***without acquiring and using*** the Program Map Table (PMT) information in the MPEG compatible stream input to the decoder." (A41377.)

This history framed one of the parties' core claim-construction disputes: whether the claim language "identifying channel map information … and assembling said identified information" includes acquisition and use of the PMT. Appellants urged that this limitation had to exclude "acquiring and using the

[3] The patentees explained that claim 23 is "considered to be patentable for the reasons given in connection with amended claim 1." (A41377.)

Program Map Information (PMT)," because the patentees had clearly disavowed that coverage in order to obtain allowance. (A24155-58; A72087-90.) Funai, naturally, urged an unlimited construction in order to strengthen its infringement case. (A23767-73; A72494-98.) The ALJ sided with Funai, concluding that the patentees had not "disavow[ed] the acquisition or use of the PMT," but had merely "noted that an advantage of the invention is dispensing with the necessity at this stage of the operation of going back to the PMT in the MPEG datastream." (A547-48.)

The ALJ's ruling was in error. As shown below, the patent document itself, as well as the prosecution history, demonstrates that the patentees clearly disavowed the use of the PMT in order to gain allowance. The ALJ's contrary conclusion improperly allowed Funai to re-expand its claims back to where they were when rejected by the examiner, and yields the perverse conclusion that the applicants *broadened* their claims to overcome a prior-art rejection. When this error is corrected, a ruling of non-infringement should follow as a matter of course, because Appellants' accused products acquire and use the PMT.

A. The Claim Language And Written Description Establish That The Claimed Invention Does Not Use The PMT

"[T]he interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316

(Fed. Cir. 2005) (en banc). Here, the asserted claims are directed to "decoding a datastream of MPEG compatible packetized program information containing program map information to provide decoded program data." (A1563:11:26-28; A1564:14:9-11.) A necessary step in that decoding process is:

> identifying channel map information conveyed within said packetized program information, and … assembling said identified information to form a channel map for identifying said individualized packetized datastreams constituting said program.

(A1563:11:30-34; A1564:14:12-17.)

As explained at pp. 14-16 above, the '074 patent is primarily focused on reducing the time it takes a television to find a user's selected program. (A1558:1:41-50; A1558:2:1-2; A283541:18-A28358:4.) A digital television may experience delay searching for and accessing the PMT because the PMT is scattered throughout each frequency band. The '074 patent reduces this delay, the specification explains, by locating a selected program "***without acquiring and using*** the Program Map Table (PMT) information." (A1561:7:51-52.)

Instead of using the PMT itself, the '074 patent teaches "replicat[ing] information already present in the Program Map Table (PMT)" into the SLD data structure, and then incorporating the SLD within the CIT. (A1561:7:36-42.) By using the replicated information rather than the PMT, "the time required . . . to identify and acquire a program being transmitted on selected sub-channel SC is

advantageously reduced." (A1561:7:40-42.) The '074 patent thus describes avoiding acquisition and use of the PMT because only replicated information in the CIT and SLD is used to find the desired channel:

> [T]he CIT and SLD provide formatted and linked information sufficient to enable processor 60 ***to directly configure*** and tune the system of FIG. 1 to receive the selected sub-channel SC.

(A:1561:7:42-45.) Such direct configuration, in turn, enables

> processor 60 to configure the system of FIG. 1 to receive the selected sub-channel SC ***without acquiring and using the Program Map Table (PMT) information*** in the MPEG compatible transport stream input to decoder 100.

(A:1561:7:49-53.) This was more than enough for the patentees to clearly and unequivocally disavow acquisition and use of the PMT as part of their invention. *On Demand Machine Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1340 (Fed. Cir. 2006) ("[W]hen the scope of the invention is clearly stated in the specification, and is described as the advantage and distinction of the invention, it is not necessary to disavow explicitly a different scope.").

The claim language reinforces this conclusion, reciting that the "channel map information replicates information conveyed in said MPEG compatible program map information." (A1563:11:36-38; A:1564:14:19-21.) The claims then require that "***said replicated information*** associates packet identifiers with individual packetized datastreams that constitute a program transmitted on a

broadcast channel." (A1563:11:38-42; A1564:14:21-25.) The claims thus confirm that "replicated information" (*i.e.,* "channel map information"), ***and not the program map table itself,*** does the work that the PMT did in the prior art. (*See* A1558:2:8-16 ("Summary of Invention" section confirming same).)

B. During Prosecution, The Patentees Unequivocally Disavowed Use Of The PMT To Overcome An Anticipation Rejection

If the patent document left any doubt regarding the exclusion of the use of PMT in the claims, the prosecution history removes it. "[B]y distinguishing the claimed invention over the prior art, an applicant is indicating ***what the claims do not cover***." *Ekchian v. Home Depot, Inc.*, 104 F.3d 1299, 1304 (Fed. Cir. 1997). Here, the patentees distinguished the asserted claims in their own bolded and capitalized language, arguing that "[i]n contrast" to the prior art, in the claimed system "the PMT is **NOT** needed to demultiplex program components" because the invention uses replicated information instead. (A41376 (emphasis in original).) Such prosecution history statements are useful for construing claims "because they indicate in the inventor's own words what the invention is not." *MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1330 (Fed. Cir. 2007).

Originally-filed claims 1 and 23 recited that "said channel map information replicates information conveyed in said MPEG compatible program map ***table***." (A40976-80.) During prosecution, the Examiner rejected all the asserted claims as anticipated by Wasilewski, stating that Wasilewski discloses "channel map data

[that] replicates data conveyed in the ***MPEG program map table*** to indicate to the viewer which programs correspond to which channels." (A41375.)

The patentees responded with two claim amendments and related remarks. First, the patentees universally deleted all references to the term "program map table," by removing any mention of the word "table." (A41371-74.) *See, e.g.*, *Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319, 1325 (Fed. Cir. 2002) (holding that patentee disclaimed coverage of triple superphospates during prosecution by "delet[ing] all reference to it to gain patentability"). Second, the patentees added the phrase "and said replicated information associates packet identifiers with individual packetized datastreams that constitute said video program." (A41371-74.) As support for the newly added language, the patentees cited the passage of the written description that explains why the invention operates "without acquiring or using" the PMT information. *Compare* A41375 ("Support for this feature is found in the existing claims and in the Application on page 12 line 24 and other places.") and A40969 *with* A1561:7:39-53.

The patentees' accompanying remarks cemented the disavowal. The patentees argued that the amended claims were not anticipated because Wasilewski "stat[es] that the 'PMT … is **needed** to demultiplex the service components of the selected program.'" (A41376 (emphasis in original).) The patentees then argued

that the amended claims were distinguishable because "the PMT is **NOT** needed" in their invention:

> ***In contrast [to Wasilewski]***, the channel map of the claim 1 system replicates the "packet identifiers used to identify individual packetized datastreams that constitute a program" in a "channel map" and ***consequently in the claim 1 system the PMT is*** **NOT** ***needed*** to demultiplex program components ***since the 'channel map' contains the required information.***

(A41376 (capitalization in original).) The "public has a right to rely on such definitive statements made during prosecution." *Rheox*, 276 F.3d at 1326.

These were not merely statements made during prosecution to avoid rejection—they reflected the essence of the patentees' claimed invention.[4] Indeed, the patentees touted the advantages of avoiding the acquisition and use of the PMT in achieving reduced channel latency:

> By ***replicating*** program map information in a "channel map", ***the time required*** by the decoder to identify and acquire a program being transmitted ***is advantageously reduced.*** This is because the channel map, together with the replicated information, enables a decoder to directly configure and tune to receive a selected channel desired by a User ***without acquiring and using the Program Map Table (PMT) information*** in the MPEG compatible stream input to the decoder.

[4] In this respect, it is worth recalling that Funai itself initially acknowledged that the use of a PMT is outside the scope of the claims—its complaint alleged that the accused products "assembl[e] information from the VCT data [i.e., CIT] and ***not from*** the information contained in ***the PMT.***" (A4373; A4382.)

(A41377.) The patentees added that "[n]either the claimed features, nor these specific advantages, are recognized or suggested in Wasilewski." (*Id.*)

This Court found a similar disavowal in *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366 (Fed. Cir. 2008). There, to overcome a prior-art rejection, the applicants argued that ***"[r]ather than requiring** a portable display and keyboard, the present invention concentrates on portability,*" and that the claimed invention has "*an advantage over laptop computers in that higher quality peripherals will more likely be used since they **need not be** transported.*" *Id.* at 1376 (italics in original; bold emphasis added). In view of these remarks, this Court held that the applicants "clearly distinguished their invention from computers with a built-in display or keyboard." *Id.*

In sum, the "totality of the prosecution history," including the amendments and arguments made to overcome prior art (*id.* at 1379), compel a finding that the patentees disavowed acquisition and use of the PMT.

C. The ALJ Misinterpreted The Patentees' Disavowal During Prosecution

The ALJ dismissed the patentees' clear disavowal with two conclusory sentences: "Far from disavowing the acquisition or use of the PMT, the inventors noted that an advantage of the invention is dispensing with the necessity at this stage of operation of going back to the PMT in the MPEG datastream. In no way can the applicants' statement be interpreted as a complete disavowal of the

acquisition or identification of PMT information." (A548.) This conclusion was erroneous because, as explained above, the entire point of the '074 patent is to solve the channel latency problem by having a faster system that did not acquire or use PMT itself.

Perhaps, as the ALJ seemed to suggest, the prosecution history's reference to the PMT being "**NOT** needed" could have been viewed—in isolation—as a statement that use the PMT was optional, but not required by the scope of the amended claims. But such a conclusion could not be squared with the patent document itself, which touts the elimination of the PMT as an advantage of the claimed invention, with the prosecution history as a whole, nor with common sense: Had the applicants been saying that the PMT was merely optional, but still within the scope of their claims, their arguments and amendments would not have avoided the anticipatory effect of Wasilewski. The claims would then have been expanded to have such breadth that Wasilewski—which "**needed** to" use the PMT (A434, emphasis in original)—would still have been embraced by the claims, even though the claims would also have covered embodiments not within the scope of Wasilewski. Under those circumstances, the amended claims and related arguments would not have overcome the Examiner's rejection. *See In re Mraz*, 455 F.2d 1069, 1072-73 (C.C.P.A. 1972) ("[C]laims are unpatentable when they are so broad as to read on [unpatentable] subject matter even though they likewise

read on [patentable] subject matter."). "Such a construction would not avoid the prior art that [patentee] distinguished … [and] would negate the clear disclaimer of claim scope made during [] prosecution." *Research Plastics, Inc. v. Federal Packing Corp.*, 421 F.3d 1290, 1297 (Fed. Cir. 2005).

Additionally, the patentees' statement during prosecution that "neither the claimed features, nor these specific advantages are recognized" by the prior art would be hollow if the claims covered optional use of the PMT. (A41377.) Indeed, "it would be peculiar for the claims to cover prior art that suffers from precisely the same problems that the specification focuses on solving." *LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1343-44 (Fed. Cir. 2005). When a patentee "describes a feature of the invention . . . and criticizes other products . . . that lack that same feature, this operates as a clear disavowal of these other products." *Astrazeneca AB v. Mutual. Pharm. Co.*, 384 F.3d 1333, 1339-40 (Fed. Cir. 2004).

Further, even if it could be said that the patentees only disclaimed the use of the PMT at the *identification* stage in favor of using replicated information, that disavowal would still require reversal because, as set forth below, the accused products *do* use the PMT at the identification stage. (A28916:21-25; A28918:7-16; A31735-36; A31744:1-A31745:17.)

Lastly, to the extent the ALJ suggested that the patentees' statements are not a disclaimer because those statements were not necessary for allowance of the claims (A548), this Court has "not allowed [patentees] to assert that claims should be interpreted as if they had surrendered only what they had to." *Norian Corp. v. Stryker Corp.*, 432 F.3d 1356, 1362 (Fed. Cir. 2005); *see Schwarz Pharma, Inc. v. Paddock Labs., Inc.*, 504 F.3d 1371, 1377 (Fed. Cir. 2007) (same).

In sum, the intrinsic evidence establishes that the phrase "identifying channel map information … and assembling said information" is properly construed to exclude acquisition and use of the PMT.

D. Appellants' Products Do Not Infringe Because [ ]

Based on an erroneous construction of the claim language "identifying channel map information … and assembling said information" that covers use of the PMT, the ALJ found that Appellants' products satisfied this limitation. (A548, A557-63.) As explained, the claims are properly construed to exclude acquisition and use of the PMT. Under the proper construction, there can be no literal infringement because the record evidence, including testimony of Funai's own expert, is unequivocal that Appellants' products [ ]. (A28916:21-25; A28918:7-16; A31735-36; A31744:1-A31745:17.) This Court should therefore reverse the ITC's judgment of literal

infringement without need for remand on that issue. *See, e.g., Sinorgchem v. ITC*, 511 F.3d 1132, 1141-42 (Fed. Cir. 2008).

II. EVEN UNDER THE ALJ'S CONSTRUCTION, APPELLANTS' WORK-AROUND PRODUCTS DO NOT INFRINGE [

]

Even aside from the error in construction, the judgment of infringement cannot be sustained for an entirely separate reason: the ALJ fundamentally misunderstood what the Virtual Channel Table ("VCT") looks like, and what happens to it, when it is transmitted to Appellants' products.

The asserted claims recite:

> [claim 1] "assembling said identified information to form a channel map ***for identifying said individualized packetized datastreams*** constituting said program"; or
>
> [claim 23] "assembling said identified information to form a channel map ***suitable for use in identifying said individual packetized datastreams*** constituting said program."

(A1563:11:33-35; A1564:14:15-17.) Infringement thus requires that an accused device must "assemble" the information "to form a channel map" that is "suitable for use" in identifying packetized datastreams.

During the Investigation, Appellants argued that their products do not meet these limitations because the products [

]

(A72106-13; A77093-108.) The ALJ, however, determined that merely storing the

VCT in DRAM in a transmitted format was sufficient for infringement. (A560-63.) According to the ALJ:

> The ATSC A/65 standard instructs that the Virtual Channel Table is for use as a channel map and is suitable for use, which is why it is sent. Bove Tr. 336-338. The Virtual Channel Table stored in memory in the [Digital Televisions] at issue in this investigation ***is a bit-for-bit copy of the A/65 Virtual Channel Table that was transmitted***, ***necessarily making it suitable for use as a channel map***. Bove Tr. 336-338; Auld Tr. 1844.

(A560.) The ALJ's logic is: (i) because the transmitted VCT information is intended to be suitable for identifying packetized datastreams; (ii) it therefore must be transmitted in a format suitable for such use; ergo (iii) Appellants' products infringe merely by storing VCT information in a transmission format even though such information is not accessed (and, in fact, is erased milliseconds after storage). (A28932:6-20.)

The record does not sustain the ALJ's logical leap between step (i) and step (ii). Rather, the record evidence uniformly demonstrates that the VCT in a transmission format [

].

A. The Record Establishes That Appellants' Work-Around Products [

]

The ALJ's conclusion that data which was ***transmitted*** is "necessarily . . . suitable for use as a channel map" improperly conflated "suitability for

transmission" with "suitability for use in identifying individual packetized datastreams." The record evidence makes clear that data in transmission format is not, without more, suitable for identifying packetized datastreams.

[

]

(A31814:10-23; *see also* A31814:24-A31818:25.)

The testimony of various third-party witnesses was in agreement. A [ ] engineer explained:

[

]

(A30664:19-A30665:13.) Further, the Vice President of Technology at [ ] explained that [

]

(A31227:14-A31228:13.)

In short, the unremarkable fact that Appellants' work-around products [

]

The ALJ's misunderstanding of what VCT data looks like when transmitted and how it is used upon receipt is confirmed by his reference to Appellants' legacy products. In the ALJ's view, VCT data in its transmission format must be "suitable for use" in identifying program packets because "the identical information was, and is, actually used in respondents' so called 'legacy' products that were designed prior to their work-around code." (A563.) Not so. In fact, appellants' legacy products [

]

(A31848:6-13; *see* A30726:22-A30727:2.)

B. The ALJ's Analysis Of The Record Evidence Is Contrary To This Court's Precedent

By truncating the infringement analysis at the storage of the transmitted VCT, the ALJ rendered superfluous the claims' further limitation of "form[ing] a channel map suitable for use in identifying said individual packetized datastreams

constituting said program." This is plainly improper. *See Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 951 (Fed. Cir. 2006) ("Allowing a patentee to argue that … characteristics specifically described in a claim are merely superfluous would render the scope of the patent ambiguous, leaving [the] public to guess about which claim language the drafter deems necessary to his claimed invention and which language is merely superfluous, nonlimiting elaboration.").

The ALJ also erroneously reasoned that "[a]s assembled in DRAM, the VCT contains all of the information required of the 'channel map,' in a format that ***can be understood and used by a properly programmed DTV***." (A563.) The claims expressly require a channel map that is "suitable for use in identifying said individual packetized datastreams." The ALJ's reasoning fails to demonstrate that this claim limitation was met: Even if a digital television that is "properly programmed" to convert the transmitted VCT data into a channel map "suitable for use" were infringing, it makes no sense to conclude that a digital television ***not*** so programmed must also be infringing.

Further, the mere possibility that Appellants' products could somehow be altered to satisfy the claim limitation is insufficient to show infringement. "Under the precedent of this circuit, [] that a device is capable of being modified to operate in an infringing manner is not sufficient, by itself, to support a finding of infringement." *Telmac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1330

(Fed. Cir. 2001). Critically absent from the ALJ's analysis, and absent from the record, is any evidence that Appellants' work-around products are so programmed. Rather, all the evidence shows that Appellants' work-around products [

]. (A28919:1-A28920:15; A28921:16-22.) As such, the requirement that the information be "assembl[ed] . . . to form a channel map suitable for use in identifying said individual packetized datastreams" was eliminated.

In sum, the ALJ erred in finding that Appellants' work-around products infringed the '074 patent merely by storing VCT data in a transmission format.

III. THE INTRINSIC EVIDENCE DEMONSTRATES THAT THE TERM "CHANNEL MAP INFORMATION" IS PROPERLY CONSTRUED NOT TO REQUIRE PROGRAM_NUMBER, PCR_PID, AND STREAM_TYPE DATA

The construction of the term "channel map information" has been at issue throughout this Investigation, with each party disputing the other's proposed construction. The central point of dispute has been whether "channel map information" must necessarily include program_number, PCR_PID, and stream_type data. (A542-47; A72095-97; A77088-92.) Appellants argued that neither the claim language nor the written description mandates that these data be part of the "channel map information." (A77088-92.) The ALJ, however, relying primarily on expert testimony and extrinsic evidence, rather than the intrinsic

evidence, improperly imported these three data limitations into the claims. (A542-47.)[5]

The "claims and the rest of the patent, along with the patent's prosecution history (together, the intrinsic evidence of the meaning of the claims) are the primary resources" for construing disputed terms. *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1329 (Fed. Cir. 2008). Though courts may reference extrinsic sources, evidence such as "expert testimony cannot overcome more persuasive intrinsic evidence." *Id.* Here, a review of the intrinsic record demonstrates that "channel map information" does not, as the ALJ ruled, require program_numbers, PCR_PIDs, and stream_types to be present. This claim-construction error, which impermissibly narrowed the term "channel map information" from its proper scope, allowed Funai to escape the inevitable invalidity of its claims.

[5] In opposition to Appellants' motion to stay the limited exclusion order pending this appeal (at 5-7), Funai made a vague assertion that Appellants had waived their argument regarding construction of this term. Funai's contention is plainly incorrect. Throughout this investigation, Appellants disputed Funai's, and later the ALJ's, construction of "channel map information" as requiring program_number, PCR_PID, and stream_type data. (A542-47; A77088-92.) There was no waiver, nor would the underlying rationale for waiver— "permitting the trial judge most familiar with a complex record to address the issue first," *Israel Bio-Engineering Project v. Amgen, Inc.*, 475 F.3d 1256, 1265 (Fed. Cir. 2007)—apply. Appellants' arguments to the ALJ and the ITC, that importing such limitations into the claim is improper, clearly framed the point of dispute and gave the ALJ and ITC the opportunity to avoid the error.

A. The Claim Language Demonstrates That "Channel Map Information" Does Not Require Program_Numbers, PCR_PIDs, Or Stream_Types

"[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms." *Phillips*, 415 F.3d at 1314. Here, to locate a user's selected program, the asserted claims require identifying and assembling "channel map information." (A1563:11:33-35; A1564:14:15-18.) The claims then recite that:

> said channel map information replicates information conveyed in said ***MPEG compatible*** program map information and said replicated information ***associates a broadcast channel with packet identifiers*** used to identify individual packetized datastreams that constitute a program transmitted on said broadcast channel.

(A1563:11:36-42; A1564:14:21-25.) A straightforward reading of the claim language shows that (1) the channel map information is identified and assembled, and (2) the channel map information then replicates MPEG-compatible information in order to associate a channel with "packet identifiers." By its own terms, the claim language requires that packet identifiers be part of the "channel map information," but the language makes no reference to, much less compels, the inclusion of other data such as program_numbers, PCR_PIDs, or stream_types.

This Court refuses to "engraft[] the claims with [ ] limitations not supported by the specification or the claims themselves." *Decisioning.com, Inc. v. Federated Department Stores, Inc.*, 527 F.3d 1300, 1312 (Fed. Cir. 2008) (declining to import

limitations concerning different types of data when the "claim language itself does not require that any particular type or quantity of information be used to verify the applicant's identity"); *see Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 689 (Fed. Cir. 2008) ("The claims make no reference to an external global controller, and we find no justification for adding limitations related to the more general video encoding device … when the claims are written to encompass only a specific element of that device.").

In addition to asserted claims, "[o]ther claims of the patent … can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips*, 415 F.3d at 1314. "[T]he presence of a dependent claim that adds a particular limitation gives rise to the presumption that the limitation in question is not present in the independent claim." *Id.* at 1315. In this case, while claim 1 is silent regarding inclusion of the PCR_PID in the channel map information, dependent claim 2 recites that the "***channel map information further associates*** an individual program with a corresponding ***program clock reference (PCR) value***." (A1563:11:42-45.) Likewise, claim 10, which depends from claim 1, introduces the idea of including a stream_type identifier in the channel map information:

> ***channel map information further associates a datastream type indicator*** with an individual packetized datastream, said datastream type indicator identifying whether said individual packetized datastream contains at least one of a) audio information, and b) video information.

(A1563:11:10-17.) Under the ALJ's approach, however, dependent claims 2 and 10 each claim an apparatus in broader terms than does independent claim 1. That is a powerful indicator that the ALJ was wrong. *See, e.g.*, *Karlin Tech., Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999).

Even apart from claim differentiation, the dependent claims demonstrate that the patentees plainly knew how to require use of PCR_PIDs, stream_types, and program_numbers, because they explicitly did so there (*e.g.*, claims 2, 10, 12, 15, 17 and 22), and in the written description (A1561:7:23-35; A1562:10:30-39), but not in claims 1 or 23. Had the patentees intended "channel map information" to require the presence of PCR_PIDs, stream_types, and program_numbers, the claims would have called for those data specifically. *See Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 807 (Fed. Cir. 2007) (rejecting construction limiting term "transverse holes" to perpendicular holes because "[t]he intrinsic evidence of the specification [] suggests that the patentees knew how to restrict their claim coverage to holes passing through at right angles. They could have used the word 'perpendicular,' as they did in discussing their preferred embodiment. Instead, they chose a different term that implies a broader scope."); *Cordis Corp. v. Medtronic Ave, Inc.*, 511 F.3d 1157, 1174 (Fed. Cir. 2008) ("If the patentee had intended claim 23 to only cover grafts with tubular members having complete slots, the patentee presumably would have drafted the claim to specify 'complete slots,'

the term used in the written description to describe such fully bounded slots."). The Court should "give effect to the terms chosen by the patentee[s]." *K-2 Corp. v. Solomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999).

Finally, "the context in which a term is used in the asserted claim can be highly instructive." *Phillips*, 415 F.3d at 1314. Here, the claims expressly recite that "channel map information replicates information conveyed in said MPEG ***compatible*** program map information," not "MPEG *compliant*" information. (1563:11:35-37; 1564:14:19-21.) The ALJ read in the specific data limitations from the MPEG-2 standard, but there is no dispute that one skilled in the art would understand "MPEG compatible" to mean that including all the referenced data from the MPEG standard is merely one optional way of accomplishing the task, whereas "MPEG compliant" would mean that including all of the data is required. (A28808:2-11; *see also* A30762:21-A30763:21.) Even Funai's own expert recognized this. (A28808:2-11 (agreeing that "MPEG compatible to people of ordinary skill in the art means that it can work with MPEG, but does not necessarily have to include everything that's in MPEG").)

B. Neither The Written Description Nor The Prosecution History Defines "Channel Map Information" As Requiring Inclusion Of Program_Numbers, PCR_PIDs, And Stream_Types

As with the claim language, nothing else in the intrinsic patent record mandates that program_numbers, PCR_PIDs, and stream_types be part of the

"channel map information." Rather, the specification makes mention of such data on only two occasions: a first passage at column 7, lines 23-35, and then a reference back to that passage at column 10, lines 34-39. The first passage demonstrates that including program_numbers, PCR_PIDs, and stream_types in the channel map information is an "example," not a requirement of the claims.

> The SLD program map information is ***exemplified*** by the data format of FIG. 4. The SLD associates the selected sub-channel SC with packet identifiers, e.g. item 420, used to identify individual packetized datastreams that constitute the components of a program being transmitted on selected sub-channel SC. In addition, the SLD program map information, in conjunction with the CIT, maps the selected sub-channel SC to a program number 405, a PCR (Program Clock Reference) identifier 410, a language code indicator 425, and a stream type identifier 415 identifying a stream as video, audio, control, auxiliary or private information, ***for example***.

(A1561:7:23-35; *see* A1560:5:62-65 ("[A]ssociated descriptors acquired and collated by processor 60 incorporates advantageous features ***exemplified*** in the data formats presented in Figs. 2-9.").) The patentees were thus "setting out specific examples of the invention" rather than "confining the claims to those embodiments." *Phillips*, 415 F.3d at 1323.

In *Tivo, Inc. v. Echostar Communications Corp.*, 516 F.3d 1290 (Fed. Cir. 2008), one of the issues was whether the term "accepting" required a digital video recorder to accept both digital and analog signals. *Id.* at 1296-97. After

determining that the claim language itself did not mandate accepting both types of signals, this Court observed that:

> At several points the specification refers to a DVR that accepts television input streams "in a multitude of forms, ***for example***, analog forms such as National Television Standards Committee (NTSC) or PAL broadcast, and digital forms such as Digital Satellite System (DSS), Digital Broadcast Services (DBS), or Advanced Television Standards Committee (ATSC)."

Id. at 1297 (emphasis in original). This Court therefore concluded that the specification "demonstrates that the claim language should not be given such a restrictive interpretation" as to ***require*** accepting analog and digital signals. *Id.* Here, too, the specification's reference to program_numbers, PCR_PIDs, and stream_types as "example[s]" of the information included in the "channel map information" demonstrates that the claims cannot be given such a restrictive interpretation.

Further, contrary to the ALJ's reliance on extrinsic evidence pertaining to the MPEG-2 standard, the specification makes clear that the invention is not restricted to what is disclosed in that standard. The patent states that program-specific information from the MPEG-2 standard "is exemplary only" and that "program specific information ***may be of a variety of types***," including "example[s]" such as the HDTV standard and various ATSC standards. (A1558:2:50-63.) The patent further states that "the principles of the invention

apply to any form of MPEG [] compatible electronic program guide," and not just MPEG-2. (A1563:11:13-15.)[6]

C. The ALJ Erroneously Construed "Channel Map Information" By Relying On Expert Testimony Rather Than The Intrinsic Record

The ALJ got to the wrong conclusion by applying the wrong methodology. He started with the extrinsic evidence, reached his conclusion that "channel map information" had to include the three specific types of data, and then viewed nothing in the intrinsic evidence as "inconsistent" with that conclusion. That was error.

The ALJ improperly started by relying on testimony from Funai's expert, Dr. Michael Bove, for the proposition that "channel map information" must include program_numbers, PCR_PIDs, and stream_types for the invention "to operate under the MPEG standard." (A543.) Starting from that premise, the ALJ imported those three pieces of data as limitations into the claims without any meaningful examination of the intrinsic record. (A543-44.) Only after using the expert testimony to arrive at his construction did the ALJ examine the written description. (A544-45.) In doing so, the ALJ identified the passage at column 7, lines 21-38 and Figure 4 as requiring that the "channel map information" include the three

[6] It bears noting that, during re-examination of the '074 patent, the PTO adopted this construction of "channel map information," which led to the conclusion that all the claims are unpatentable. (A84175-76.)

pieces of data. Lastly, the ALJ again resorted to extrinsic evidence in the form of an Annex to the MPEG-2 standard to confirm his construction. (A546-47.)

The ALJ's analysis errs in multiple respects. First, the ALJ "did not use the extrinsic evidence to assist in defining a claim limitation, but rather used it to limit claim scope based on the purpose of the invention***, which is impermissible.***" *Storage Tech. Corp. v. Cisco Sys., Inc.*, 329 F.3d 823, 833 (Fed. Cir. 2003). Moreover, even were the ALJ correct that including the three pieces of data are necessary for the claims "to operate under an MPEG standard" (A544), that still would not permit importing those limitations into "channel map information": It has long been the law that "[a]dmitting that additional elements are necessary to render the device operative, it does not necessarily follow that … the precise elements described in the patent as rendering it operative must be read into the claim." *Deering v. Winonia Harvester Works*, 155 U.S. 286, 302 (1894); *see Rambus Inc. v. Infineon Techs. AG*, 318 F.3d 1081, 1093 (Fed. Cir. 2003) ("Even though the memory device needs this information, the claim need not recite every component necessary to enable operation of a working device.").

Second, the ALJ made no finding that the intrinsic evidence was ambiguous or insufficient to construe "channel map information." In fact, the ALJ reached the erroneous construction by considering the expert testimony ***before*** ever examining the written description. *See Nazomi Communications, Inc. v. Arm Holdings, PLC*,

403 F.3d 1364, 1369 (Fed. Cir. 2005) ("[T]o reach a proper construction, the district court ***must look first*** to the claims, the specification, and the prosecution history, and if further guidance is needed to extrinsic evidence, such as dictionaries and expert opinions."); *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed. Cir. 1996) ("Only if there were still some ambiguity in the claims, ***after*** consideration of all available intrinsic evidence, should the trial court have resorted to extrinsic evidence, such as expert testimony.").

Third, as explained above in Section I.B.2, the claim language and written description make clear that the asserted claims may allow, but do not ***require***, that program_numbers, PCR_PIDs, and stream_types be part of the "channel map information." Words like "exemplified" (A1561:7:23-25) and "for example" (A1561:7:29-35) do not establish a lexicographic intent to define "channel map information" as ***requiring*** such data. "[I]t is improper to import limitations from the specification into the claims where there is no indication that the specific examples in the specification are intended to be strictly coextensive with the claim." *Kinetic Concepts, Inc. v. Blue Sky Med. Grp., Inc.*, 554 F.3d 1010, 1028 (Fed. Cir. 2009); *see In re Omeprazole Patent Litigation*, 483 F.3d 1364, 1372 (Fed. Cir. 2007) ("[T]his court does not import examples from the specification into the claims" absent persuasive evidence to the contrary.).

Finally, based on testimony that the inventors "looked to" the MPEG Annex "when determining which replicated MPEG PMT information to include in the channel map information" (A547 n.9), the ALJ incorrectly relied on various parts of the MPEG-2 standard to construe "channel map information." (A546-47.) Of course, "inventor testimony as to the inventor's subjective intent is irrelevant to the issue of claim construction." *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1338 (Fed. Cir. 2009). Moreover, the Annex to the MPEG-2 standard, which was not part of the prior art cited during prosecution, was extrinsic evidence that should not have been used to contradict a construction mandated by the intrinsic evidence. *See Phillips*, 415 F.3d at 1318-19.

The ALJ also relied on Section 2.4 of the MPEG standard as support for including all three of these items of data within "channel map information." (A546-47.) Although Section 2.4 is prior art of record, it lends little or no support to the ALJ's analysis. Because its "usage is not that of the patentee, . . . it merits less weight than the evidence of the patentees' own words . . . the specification and claims of the [asserted] patent itself should be given significantly greater weight." *Accumed*, 483 F.3d at 809; *see Osram GmbH v. International Trade Comm'n*, 505 F.3d 1351, 1357-58 ("It is rare that references that were submitted with a disclosure document, but not even cited by the examiner, are probative of an

intent to depart from the plain technical meaning of terms used in the specification and claims.").

In sum, the intrinsic evidence establishes that "channel map information" is properly construed not to require the presence of program_number, PCR_PID, and stream_type data.

D. Under The Proper Construction Of "Channel Map Information," There Is No Dispute That The A/55 Standard Anticipates The Asserted Claims

The sole issue regarding anticipation of the asserted claims by the A/55 standard is whether the A/55 discloses "channel map information." (A569-70.) The ALJ himself noted that "it is undisputed that the A/55 standard discloses the replication of some PMT information." (A570.) Likewise, Funai's expert admitted that the A/55 standard discloses the stream_type and elementary_PID data. (A32435:22-A32436:14; A32839:6-11.) However, working from an erroneous construction of "channel map information," the ALJ found that the A/55 standard is not anticipatory because it purportedly did not disclose PCR_PID and progam_number data. (A570.) Because the ALJ's only grounds for distinguishing the A/55 standard were limitations that are not required under a proper construction, this Court should hold the asserted claims invalid as anticipated without remand.

IV. THE ASSERTED CLAIMS ARE INVALID AS ANTICIPATED AND OBVIOUS EVEN UNDER THE ALJ'S CONSTRUCTION OF THE TERM "CHANNEL MAP INFORMATION"

A. The A/55 Standard Anticipates Even Under The ALJ's Construction

Having construed the term "channel map information" as necessarily including program_number, PCR_PID, and stream_type data (A543-44), the ALJ then determined that the A/55 standard does not anticipate the asserted claims because the A/55 standard did not disclose the program_number and PRC_PID data. (A570.) The record evidence, however, clearly demonstrates that the A/55 standard discloses both pieces of data.

1. The A/55 Standard Discloses Program_Numbers

The ALJ concluded, without explanation, that the "channel number" in the A/55 standard is not a program_number because the two numbers have "different syntax." (A570.) An agency's findings, however, "must be expressed with sufficient particularity to enable [this] court, without resort to speculation, to understand the reasoning … and to determine whether … the evidence supported the underlying and ultimate fact findings." *Gechter v. Davidson*, 116 F.3d 1454, 1457 (Fed. Cir. 1997). Here, the ALJ cited no record evidence to support its statement and provided no explanation as to why a "different syntax" is material to anticipation. Indeed, even the ALJ's construction, while importing the program_number limitation, makes no reference or mention of a

program_number's "syntax." The ALJ's failure to explain its reasoning and to identify any "supporting evidence runs dangerously close to turning the substantial evidence standard on its head." *Singh v. Brake*, 222 F.3d 1362, 1372 (Fed. Cir. 2000) (Gajarsa, J., concurring).

In any event, the ALJ's statement is unsupportable. The record unambiguously demonstrates that the channel numbers in the A/55 standard constitute a disclosure of "program_numbers." Most simply: the A/55 standard itself expressly states that "[t]he ***channel number corresponds to the program number*** in MPEG system PSI [Program Specific Information] sections." (A37006.)

Witness testimony reinforces the point. (A30293:15-A30294:9; A32840:8-13.) Funai's own expert so testified:

> Q. So somebody of ordinary skill reading this would understand that program number does correspond to channel number in the context of A/55 as of 1996, right, Doctor?
>
> A. Well, the plain language is it says it corresponds, yes.

(A32840:8-13.) Similarly, Dr. Mark Eyer, a third-party witness who worked on extending the A/55 standard for use with other standards, testified that the "channel number in A/55 is the same as the MPEG program number." (A30232:12-13.)

The ALJ's conclusion that the A/55 standard does not disclose program_numbers is manifestly wrong.

2. The A/55 Standard Discloses PCR_PIDs

The ALJ also concluded that the A/55 standard does not disclose the PCR_PID data. (A570.) This, too, is incorrect.

The A/55 standard expressly describes a "time_base_PID," which the standard explains constitutes a "PCR_PID":

> If the transport stream carries any video or audio programs, there needs to be at least one, or possibly multiple PCR_PIDs … in the transport stream that carry PCR fields. ***The time_base_PID in this list can be any of those PCR carrying PIDs***.

(A36999.) Funai's own expert admitted that the A/55 standard discloses a PCR_PID:

> Q. [The A/55 standard] was known to people of ordinary skill in the art as of the filing date of the application for the '074 patent, right, Doctor?
>
> A. Yes.
>
> …
>
> Q. So A/55 does disclose a data structure [that] can contain a PCR_PID, right, Doctor?
>
> A. Yes.

(A32842:14-A32843:2.)

Funai's expert argued that the A/55 standard's disclosure of time_base_PID constitutes a PCR_PID "only under particular circumstances." (A32439: 19-32440:1.) Similarly, the ALJ found that the time_base_PID provides a "clock reference for the entire transmission channel rather than a single program as in the

case of PCR_PID" (A570)—apparently meaning that even though the time_base_PID is sometimes satisfied by a PCR_PID under the A/55 standard, the requirement somehow refers to a broader channel reference clock than a single program reference. Neither point is relevant to anticipation. When a prior-art reference discloses multiple embodiments, ***each disclosed embodiment*** can be anticipatory. *See Leggett & Platt v. VUTEk, Inc.*, 537 F.3d 1349, 1356 (Fed. Cir. 2008) (affirming summary judgment of anticipation and rejecting "the erroneous assumption that the disclosure of multiple examples renders one example less anticipatory"); *Hewlett-Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1326 (Fed. Cir. 2003) ("Just as an accused product that sometimes, but not always, embodies a claimed method nonetheless infringes, a prior art product that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention.").

When evaluating invalidity, "[w]hat matters is the objective reach of the claim." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007). Here, there is no dispute that the asserted claims are broad enough to cover embodiments in which there are multiple programs on one channel ***and*** embodiments in which there is a single program on one channel. In the latter case, even Funai's expert agreed that the time_base_PID constitutes a clock reference for a single program, *i.e.*, the PCR_PID. (A32850:14-A32851:2.) Accordingly, the asserted claims are

anticipated because they cover embodiments disclosed in the A/55 standard, regardless of whether the claims may also cover embodiments not disclosed in the A/55 standard. *See Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1328 n.4 (Fed. Cir. 2008) (noting "the long-established rule that 'claims which are broad enough to read on obvious subject matter are unpatentable even though they also read on nonobvious subject matter").

In sum, the record evidence establishes that the A/55 standard expressly discloses both program_number and PCR_PID data. Accordingly, the standard anticipates the asserted claims, even under the ALJ's erroneous construction of "channel map information" as requiring such data.

B. The Asserted Claims Would Have Been Obvious In View Of The A/55 Standard Combined With The Eyer Patent

Appellants also demonstrated that the combination of the A/55 standard and U.S. Patent No. 5,982,411 ("Eyer") disclosed all the claim limitations and therefore rendered the claims obvious. Contrary to the record evidence adduced at trial and without any meaningful analysis of that evidence, the ALJ dismissed the obviousness issue with the statement that "even if all of the elements were known in the prior art, it would not necessarily have been obvious to combine them." (A571.) That conclusory statement is insupportable.

An obviousness "analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the

inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418. In this case, to the extent that the A/55 standard does not itself anticipate the asserted claims under the ALJ's construction, such claims at least would have been obvious to anyone skilled in the art who viewed the A/55 standard together with Eyer. Indeed, because obviousness in this case is apparent on the face of the prior-art references, the prior art alone suffices to establish the invalidity. *See Ball Aerosol & Specialty Container, Inc. v. Limited Brands, Inc.*, 555 F.3d 984, 994 (Fed. Cir. 2009).

1. The Eyer Patent Describes A "Virtual Channel Record" For Identifying Packetized Datastreams In Television Broadcast Transmissions, Thereby Suggesting A Combination With The A/55 Standard

Like the A/55 standard, the Eyer patent relates to the field of digital television transmission. It discloses a system that allows users to navigate commonly-grouped channels and programs. (A45576 (Abstract); A45579:1:14-15, A45579:2:58-60.) Eyer teaches a "'virtual channel' record which associates the primary channel with the broadcast addresses in which secondary channels are carried." (A45580:3:48-50.) Eyer also discloses a virtual channel map that "comprises a plurality of virtual channel records." (A45580:3:51-53.)

To locate a desired channel, Eyer teaches "identifying the PIDs in which the selected programming service is carried in the digital signal" (A45582:7:65-8:1), and explains that "channel grouping information may be carried in a virtual

channel map which is provided in the transport stream." (A45582:8:24-26.) Eyer then teaches creating a "virtual channel record" and provides the first part of the syntax for such a record in Table 3. (A45583:10:57-58.) Eyer explains that the partial syntax set forth in that table is compatible with the ATSC standards and suggests that practitioners look to the A/56 standard for a complete syntax:

> Table 3 shows only the first part of a required record. The syntax is compatible with standards of the Advanced Television Systems Committee (ATSC) described in "System Information for Digital Television--ATSC Standard," Document A/56, Jan. 3, 1996, Advanced Television Systems Committee.

(A45583:10:59-63.)

The A/55 standard and A/56 standard together define the system information contained in the overall ATSC standard for digital television. Thus, Eyer suggests to those skilled in the art that its teachings should be combined with the A/55 standard to provide the full syntax for the disclosed "virtual channel record." *See In re Baird*, 16 F.3d 380, 383 (Fed. Cir. 1994) ("[A] reference must be considered not only for what it expressly teaches, but also for what it fairly suggests."). Indeed, persons skilled in the art working on the ATSC did combine the A/55 standard (work largely done by named inventor Ozkan) with the A/56 standard (work largely done by Eyer) to create the A/65 standard. (A30209:17-A30210:3; A30211:21-23; A29924:13-19; A30212:11-A30213:23.)

2. The Combination Of The A/55 Standard With Eyer Renders The Asserted Claims Obvious

Funai's expert conceded that the A/55 standard discloses channel map information that includes the stream_type and elementary_PID data. (A32435:22-A32436:14; A32839:6-11.) Funai's expert also conceded that through its discussion of the A/56 standard, Eyer discloses replicating a program_number:

> [I]nasmuch as the A/56 standard does disclose replicating program number, I infer that one of ordinary skill in the art might well read this also to include replicating program number by inheritance from A/56.

(A32447:24-A32448:3.)

Funai's expert further testified that persons of ordinary skill would have known of PCR_PIDs "from the MPEG-2 system standard, among other things," and that PCR_PIDs were used to avoid "lip sync problems" between video and audio data. (A32892:16-A32894:14; A32921:23-24.) Funai's expert further confirmed that the A/55 standard discloses the PCR_PID data structure. (A32842:14-2794:2.)

Thus, by the account of Funai's own expert, all the limitations of the asserted claims are disclosed by the combination of A/55 standard and Eyer. Against this record evidence, the ALJ stated only that combining those separately disclosed elements would not have been obvious. (A571.) But of course it would have been: Eyer itself clearly suggested the combination. No person of ordinary

skill in the art, employing the usual "inferences and creative steps," *KSR*, 550 U.S. at 417, possibly could have missed that suggestion.

Moreover, even if combining the elements of Eyer's "virtual channel record" with the A/55 standard had not been written directly into Eyer, the disclosure of those multiple elements was enough to render their combination obvious. As *KSR* makes clear, a combination is obvious where it "simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement." 550 U.S. at 417. That is exactly what the '074 patent does, no more and no less: it arranges previously disclosed elements for identifying packetized datastreams, with each element performing the same identification or matching function it had been known to perform, and yields no more than one would expect from that arrangement.[7]

---

[7] The ALJ also noted that "there is some evidence of secondary considerations that weigh against a finding of obviousness," but acknowledged that these considerations "would probably not be sufficient to overcome a strong showing of obviousness." (A572 n.32.) Those considerations were (1) that [ ] companies have licensed the '074 patent, and (2) that "the industry considered a channel map to be a 'good idea.'" *Id.*

As to licensing: This Court "specifically require[s] affirmative evidence of nexus where the evidence of commercial success presented is a license." *Iron Grip Barbell Co., v. York Barbell Co.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004). The record is devoid of such evidence. The relied-upon licenses [ ] (A571 n.32.) Thus, little, if any, weight "can be attributed to such evidence if the patentee does not demonstrate a nexus between the merits of the invention and the licenses of record." *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995). Moreover, the ALJ observed that the other

(continued…)

relied-upon licenses [ ] (A572 n.32.) Such evidence fails to establish a nexus "because it is often cheaper to take licenses than to defend infringement suits." *Iron Grip*, 392 F.3d at 1324.

As to the industry praise: The record is devoid of any evidence establishing a nexus between the asserted claims and any industry standard. Secondary considerations are applicable to "the patented invention ***only where*** 'the marketed product embodies the claimed features, and is coextensive with them.'" *Muniauction*, 532 F.3d at 1328. Here, Funai's own expert testified that he did not know of any standards to which the '074 patent is essential nor was he aware of any standard that identifies the patent as a "good idea." (A28936:2-15; A32919:18-A32920:1.)

CONCLUSION

For these reasons, the Court should reverse the ITC's determination that appellants have violated 19 U.S.C. § 1337 and vacate the Limited Exclusion Order and Orders to Cease and Desist entered in this Investigation.

Dated: July 24, 2009

Respectfully submitted,

Mark A. Samuels by GAC

MARK A. SAMUELS
BRIAN M. BERLINER
O'MELVENY & MYERS LLP
400 South Hope Street
Los Angeles, CA 90071-2899
(213) 430-6000

JONATHAN HACKER
O'MELVENY & MYERS LLP
1625 Eye Street, N.W.
Washington, D.C. 20006
(202) 383-5300

Attorneys for Appellants TPV Technology Ltd., TPV International (USA), Inc., Top Victory Electronics (Taiwan) Co., Ltd., and Envision Peripherals, Inc.

GREGORY A. CASTANIAS
ERIC S. NAMROW
JONES DAY
51 Louisiana Avenue, N.W.
Washington, D.C. 20001-2113
(202) 879-3939

SASHA MAYERGOYZ
JONES DAY
77 West Wacker
Chicago, IL 60601-1692
(312) 782-3939

Attorneys for Appellants Vizio, Inc. and AmTran Technology Co., Ltd.

DECLARATION OF AUTHORITY

I, Gregory A. Castanias, a member of the Bar of this Court, declare that I have been authorized to sign this paper on behalf of Mark A. Samuels of O'Melveny & Myers LLP, pursuant to this Court's Rule 47.3(d).

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 24, 2009.

Gregory A. Castanias
Jones Day
51 Louisiana Avenue, N.W.
Washington, D.C. 20001-2113

CERTIFICATE OF SERVICE

I certify that on July 24, 2009, two bound copies of the foregoing APPELLANTS' NON-CONFIDENTIAL BRIEF, were served by hand upon the following counsel of record:

Daniel Valencia, Esq.
U.S. International Trade Commission
500 E Street, SW
Suite 707-L
Washington, DC 20436

Attorneys for Appellee,
U.S. International Trade Commission

G. Brian Busey, Esq.
Morrison & Foerster LLP
2000 Pennsylvania Avenue, N.W., Suite 5500
Washington, D.C. 20006

Attorneys for Intervenors

I also certify that on July 24, 2009, one original and 4 bound copies of the foregoing APPELLANTS' NON-CONFIDENTIAL BRIEF, were filed, by hand delivery, in the Office of the Clerk, United States Court of Appeals for the Federal Circuit.

Gregory A. Castanias
Attorney for Appellants

CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B). It contains 13,567 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6). It has been prepared in proportionality spaced typeface using Microsoft Office Word 2003 SP2 in 14 point Times New Roman font.

Gregory A. Castanias
Attorney for Appellants

Dated: July 24, 2009