

Nos. 2007-1023, -1024

United States Court of Appeals

For the Federal Circuit

FINISAR CORPORATION,

Plaintiff-Cross Appellant,

v.

THE DIRECTV GROUP, INC., DIRECTV HOLDINGS LLC,
DIRECTV ENTERPRISES LLC, DIRECTV OPERATIONS LLC,
HUGHES NETWORK SYSTEMS, INC., and DIRECTV, INC.,

Defendants-Appellants.

**Appeals From The United States District Court
For The Eastern District Of Texas
In Case No. 1:05-CV-00264, Judge Ron Clark**

**NON-CONFIDENTIAL BRIEF OF
DEFENDANTS-APPELLANTS**

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CERTIFICATE OF INTEREST

Counsel for defendants-appellants hereby certifies the following:

1. The full name of every party represented by me is:

The DIRECTV Group, Inc.
DIRECTV Holdings, LLC
DIRECTV Enterprises, LLC
DIRECTV Operations, LLC
Hughes Network Systems, Inc.
DIRECTV, Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

Not applicable.

3. All parent corporations and any publicly held companies that own 10 percent of more of the stock of the party or amicus curiae represented by me are:

News Corporation, through its wholly owned subsidiary Fox Entertainment Group, owns more than 10 percent of The DIRECTV Group, Inc. stock. No other entities own 10 percent or more of the stock of any defendant.

4. The name of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are appearing in this Court are:

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Pursuant to Federal Circuit Rule 28(d)(1)(B), material subject to a protective order entered by the United States District Court for the Eastern District of Texas has been redacted from this brief. The material omitted on page 8 is from a confidential Finisar document and discusses Finisar’s description of the claimed invention. The material omitted on page 29 is subject to the protective order due to proprietary DIRECTV documents filed under seal with that material. The material omitted sets forth a definition relevant to claim construction. The material omitted at the bottom of page 65 is excerpted from a deposition filed under seal because the deponent had proprietary and confidential DIRECTV information; accordingly, the material filed with the deposition and excerpted on pages 62-64 and at the top of page 65 was also filed under seal. The material omitted on pages 62-65 relates to testimony and exhibits excluded by the district court.

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TABLE OF ABBREVIATIONS

Parties

DIRECTV	The DIRECTV Group, Inc.; DIRECTV Holdings, LLC; DIRECTV Enterprises LLC; DIRECTV Operations, LLC; Hughes Network Systems, Inc.; and DIRECTV, Inc.
Finisar	Finisar Corporation

Defined Terms

the ‘505 patent <i>or</i> the patent	Finisar’s U.S. Letters Patent No. 5,404,505, issued April 4, 1995, entitled “System for Scheduling Transmission of Indexed and Requested Database Tiers on Demand at Varying Repetition Rates” (A133-57)
(____:____)	Column and line number in the ‘505 patent
A____	Joint Appendix page(s)
<i>Videotex Architecture</i>	Jan Gecsei, <i>The Architecture of Videotex Systems</i> (1983)
PTO	Patent and Trademark Office
FCC	Federal Communications Commission
court	United States District Court for the Eastern District of Texas, Honorable Ron Clark presiding
Court	United States Court of Appeals for the Federal Circuit
JMOL	Judgment as a matter of law

All emphasis in this brief is added unless otherwise indicated.

STATEMENT OF RELATED CASES

Other than Plaintiff-Cross Appellant's cross-appeal, Defendants-Appellants are aware of no other appeal in or from the same civil action or proceeding in the lower court.

Two pending declaratory-judgment actions involve Plaintiff-Cross Appellant and the same patent-in-suit as in this case. These cases are *Comcast Cable Communications v. Finisar Corp.*, No. 3:06-cv-04206-WHA (N.D. Cal. filed July 7, 2006), and *EchoStar Satellite LLC v. Finisar Corp.*, No. 1:06-cv-00425-JJF (D. Del. filed July 10, 2006).

In addition, two reexaminations of the patent-in-suit have been requested, including one based primarily on the *Videotex Architecture* reference presented as evidence of invalidity in this case. *See* Reexamination Control No. 90/008,408 (PTO), filed Jan. 12, 2007 (granted Mar. 21, 2007); Reexamination Control No. 90/008,282 (PTO), filed Oct. 5, 2006 (based on *Videotex Architecture*; granted Dec. 11, 2006).

JURISDICTIONAL STATEMENT

The district court had jurisdiction under 28 U.S.C. §§ 1331 & 1338(a); entered final judgment on July 7, 2006; and, on September 5, 2006, denied defendants' timely-filed post-judgment motions. This appeal, noticed on October 4, 2006, is timely. *See* 28 U.S.C. § 2107(a); Fed. R. App. P. 4. This Court has jurisdiction under 28 U.S.C. § 1295(a)(1).

STATEMENT OF ISSUES

1. ***Claim construction:*** Whether the court properly construed the terms (a) "information database" and (b) "downloading into a memory storage device," where each construction was much broader than the term's ordinary understanding and use in the specification; and whether, under a correct construction, DIRECTV infringes.
2. ***Noninfringement:*** Whether, even accepting the court's constructions, Finisar presented substantial evidence that DIRECTV directly and literally infringes, where DIRECTV does not "schedule" transmission times for "*each* selected portion" of the information database, in part because most DIRECTV program transmissions are controlled (scheduled) by unaffiliated content providers like television and cable networks.
3. ***Invalidity:*** Whether a reasonable jury could have concluded that the claims-in-suit were not invalid, where prior-art data-distribution-system *Videotex*

Architecture clearly discloses, alone and in combination with other prior art, all elements of all claims-in-suit.

4. ***Willful infringement and enhanced damages:***

(a) Whether Finisar presented clear-and-convincing evidence of willful infringement, where (among other things) DIRECTV's system was developed and commercialized before the '505 patent issued, DIRECTV evaluated Finisar's infringement allegations (first made nine years after the patent's issuance) and obtained a 55-page noninfringement opinion from experienced outside counsel, and Finisar presented no evidence that the opinion was badly-reasoned or incomplete;

(b) regardless, whether the punitive enhancement is consistent with constitutional due process, in light of the undisputed absence of any reprehensible conduct by DIRECTV; and

(c) whether a new willful-infringement trial is warranted to permit DIRECTV to present the personally-held views and knowledge of the DIRECTV officer responsible for handling infringement charges, which the court excluded by reference to a local rule governing only production of existing documents.

STATEMENT OF THE CASE

A. Preliminary Statement

Finisar's '505 patent claims an asserted improvement in a crowded art—the well-developed (by 1991) field of digital information distribution. The concept behind the patent was to emulate then-existing query-based information systems that used two-way links over slow (circa 1991) telephone lines (*e.g.*, Compuserve, wherein requests were sent by modem to a database or “library” of information, and the desired information was retrieved and sent to the requestor), by instead using faster one-way links such as cable or satellite and continually re-sending the most requested contents of the database. To do this, the database contents were embedded with specialized identifying indices and the most popular contents then sent in repeating cycles, so that most information a user might request would be in the more-frequently-repeated cycles and therefore appear to be “delivered” instantaneously in response to the user's query.

Finisar's Dr. Levinson did not invent the different technology of direct broadcast satellite (DBS) television, such as the accused DIRECTV system. In DBS television systems, just as in earlier cable systems, most information (*i.e.*, television programming) is simply passed through from third-party content providers like CNN, HBO, and ESPN, according to schedules controlled by the provider. A subscriber may be informed when to expect a program, but the

subscriber cannot make a request or query for programs from a database or “library.” Such television systems do not emulate query-based information systems in any manner, but are an old and distinct form of pass-through programming delivery.

The court’s overly-broad claim-construction rulings, however, mischaracterized the patent as a fundamental advancement, thereby permitting the jury to find that the patent claims read onto the DIRECTV system. Those errors, among others, warrant reversal.

B. Procedural History

On April 4, 2005, Finisar sued DIRECTV for infringement. (A162-80.) DIRECTV raised five defenses and asserted noninfringement and invalidity declaratory-judgment counterclaims. (A350-68.)

In its initial infringement contentions (June 2005), Finisar alleged infringement of 15 of the patent’s 48 claims. (A96-97, A436-41.) After a January 2006 *Markman* hearing—where the court defined ordinary skill to require at least an undergraduate education in electrical engineering, computer engineering, or computer science, and at least two-to-three years’ experience in data communications and software engineering (A4)—the court found seven claims (1, 2, 7, 9, 10, 11, and 37) indefinite (later granting DIRECTV summary judgment (A25-27)), and construed disputed terms in the remaining eight claims. *See*

Finisar Corp. v. DIRECTV Group, 416 F. Supp. 2d 512 (E.D. Tex. 2006).¹ (A3-23.) Just before trial, Finisar dropped infringement allegations for claim 25. (*See* A16224-27.)

The remaining seven claims (16, 17, 22, 24, 26, 39, and 44) were tried to a jury from June 12-22, 2006. (A123-26.) Importantly for present purposes, Finisar dropped its doctrine-of-equivalents claims before the jury charge, and proceeded solely on literal infringement. (A17575.)

On June 23, 2006, the jury found the seven claims literally infringed (directly, by inducement, and by contribution), willfully infringed, and not invalid, and awarded Finisar \$78.9 million in reasonable-royalty damages. (A79-82.) On July 6, 2006, the court ruled on the parties' Rule 50(a) motions, sustaining the verdict except as to induced and contributory infringement. (A17934-37.)

Applying *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837 (2006), the court denied Finisar's requests for injunctive relief and attorneys' fees; imposed a compulsory license; and awarded Finisar pre- and post-judgment interest, \$25 million in enhanced damages, and costs. (A17937-44.) All of this was set forth in the final judgment, entered the next day. (A1-2.)

On July 21, 2006, DIRECTV filed two post-judgment motions. One motion, under Rule 50(b), sought JMOL or a new trial on liability only, directed to the

¹ The other published opinion, 424 F. Supp. 2d 896 (E.D. Tex. 2006), concerns an evidentiary ruling not challenged here.

infringement, willful-infringement, and validity determinations; it further sought a new trial based on, among other things, certain evidentiary rulings. (A129.) The second motion, under Rule 52(b), challenged, *inter alia*, the enhanced-damages award. (A129-30.) On September 5, 2006, the court denied both motions. (A28-35.) This appeal followed. (A16958-60.)

STATEMENT OF FACTS

A. The Two Different Technologies

1. The ‘505 Patent: A Hierarchically Indexed System for Data Distribution

In 1991, seven years after DIRECTV began developing its system, Finisar’s founder Dr. Frank Levinson applied for the ‘505 patent, using the title “Information Broadcasting System and Method.” (A133, A18214-15.) In 1995, one year after DIRECTV commercially launched its system, the patent issued, under the revised title “System for Scheduling Transmission of Indexed and Requested Database Tiers on Demand at Varying Repetition Rates,” and containing 48 claims. (A133, A148-57.)

The patent claims a high-speed system for scheduling and transmitting information from a large database, “not unlike . . . the main library of a major university,” to users via, in part, one-directional links such as cable or satellite. (A140 (1:46-53, 2:14-15, 2:46-52).) The “goal” of the disclosed system was to emulate the functions of known query-based information services such as Prodigy,

Compuserve, and Dialog, but by using higher-speed data links such as cable or satellite, rather than the slow, two-way telephone links previously used—to provide widespread, high speed access to a virtual omniscient database having typically well in excess of a terabyte ([one trillion] bytes) of data.” (A140 (1:14-22, 1:54-57).) It achieves this in part by a hierarchical arrangement of the particular information in the database (the library), cyclic transmission of most of that information, and “a bandwidth that is thousands of times greater than the prior art systems [1991-vintage telephone modems], thereby enabling high speed, low cost distribution of information.” (A140 (1:43-46).) This permits prompt transmission of anticipated user requests, emulating two-way query-based systems.

Levinson’s application was based entirely on conceptual work; he made no attempt to reduce to practice any part of the claimed invention. (A17045.) He assembled no hardware, and wrote no software. (A17045-46, A17060.) During prosecution, neither Levinson nor Finisar disclosed any patent or other publication. While the PTO referred to nine patents, it cited no publications or other references. (A133, A17055-56.)

Finisar never commercialized the patent. (A17073-74.) But in seeking to license it, Finisar, consistent with the patent specification, called the invention “a simpler, lower cost alternative to direct internet access,” and said that “through careful organization of the data and some special driver software . . . it will be

possible for us to construct a new on-line service which is extremely useful.”

(A23278.) Finisar likewise stated that [

] (A16173.)

All seven claims before the jury were method claims (A150-51, A155-56); many contain numerous steps. Moreover, many steps use the term “said” to refer to requirements in other steps, thereby requiring that the same accused action or component satisfy multiple claim steps. Claims 16, 39, and 44 are independent claims; claims 17, 22, 24, and 26 depend from claim 16.

The language in claim 16 is illustrative²:

An information transmission method comprising the steps of:

[(a)] storing an *information database* on one or more memory devices;

[(b)] generating and storing on *said memory devices* a hierarchically arranged set of indices for referencing data in *said information database*, including distinct portions thereof, and embedding said indices in *said information database*;

[(c)] scheduling transmission of selected portions of *said information database*, including assigning each selected

² The elements of claim 16 are required by its four dependent claims. In addition, 16(a) through (d) and (f) through (h) are steps (a) through (g) of the remaining independent claims (39 and 44). (A150 (21:36-68), A155 (31:19-46), A156 (33:25-51).)

portion of *said information database* one or more scheduled transmission times;

[(d)] transmitting a stream of data packets containing *said selected portions* of *said information database* in accordance with *said scheduled transmission times*;

[(e)] *said scheduling step* including dividing *said selected portions* of *said information database* into a prioritized set of tiers, wherein all the selected portions of *said information database* in each tier are transmitted at a corresponding repetition rate, wherein the repetition rate for higher priority tiers is higher than the repetition rate for lower priority tiers;

[(f)] receiving *said transmitted stream* of data packets at subscriber stations;

[(g)] at each subscriber stations, storing filter data corresponding to a subset of *said indices*, said filter data specifying a set of requested data packets which comprises a subset of *said transmitted data packets*; and

[(h)] at each subscriber station, downloading into a memory storage device those of *said received data packets* which match *said specified set* of requested data packets.

(A150 (21:34-68).)

2. The DIRECTV System: A Direct-to-Home Satellite Television Broadcast System

Development of DIRECTV's system began in 1984, with issuance of an FCC license for a system for sending television entertainment to homes not served by cable. The goal was satellite delivery of the same multi-channel programming and services provided by cable TV. (A17369, A864-81.) DIRECTV invested over \$600 million for development of satellites, other hardware, and software.

(A17272, A17274, A17283-84.) DIRECTV launched commercially in 1994, and is the leading direct-to-home satellite broadcaster in the United States. (A17162, A17210, A17369.) These facts, and how DIRECTV operates, are not in dispute.

DIRECTV permits subscribers to access (via a small antenna, associated electronics, and a set-top box) a large number of television channels broadcast from several satellites. (A17275, A17324, A17369.) The vast majority of these channels, like HBO and ESPN, are owned and controlled by other entities; DIRECTV cannot and does not control, or schedule, their delivery to DIRECTV subscribers. Instead, DIRECTV merely re-broadcasts (or “turns around”) that content as transmitted by those providers. (A17287, A17296, A17324.) (In contrast to that vast majority, DIRECTV does schedule the transmission of its pay-per-view programming. (A17288.)) Thus, DIRECTV does not schedule the transmission of each part of its transmitted content. (A17306-07.) Likewise, DIRECTV has no library-like “information database,” by which specific items of information are available for selection and retrieval by the user: Most programming available to DIRECTV subscribers is transmitted via a constantly changing audio-and-video-data stream that passes through the subscriber’s set-top box; a subscriber cannot request particular programs. (A17304-06, A17119.) The buffer in DIRECTV set-top boxes only holds data as it passes through, for

technical purposes to enable the data's display; the buffer does not hold the data beyond real-time to permit later retrieval. (A17098-17100.)

DIRECTV also broadcasts an electronic program guide compiled from listings purchased from a third party, Tribune Media Services. (A17296.) The guide allows subscribers to determine what program is being shown on a particular channel at a particular time, and to tune to that channel if desired. (A17304-05.) Subscribers cannot request transmission of a program at other times; they may only select from programs expected to be broadcast at the time shown in the guide. (A17289, A17304-06, A17309.) Even then, a program's listing on the guide does not ensure that the subscriber will be able to view that program by selecting that channel at the designated time, because the channel's content is controlled by the provider, not DIRECTV. (A17306, A17324.) Thus, what appears on DIRECTV's program guide is "the networks' *intended* schedule." (A17313.) When the provider changes its schedule, a sports event goes to overtime, or breaking news interrupts regularly-scheduled programs, the guide is not corrected to inform subscribers of the changed broadcasts. (A17287, A17306.)

Because programs typically air in 30-minute multiples, the DIRECTV facilities in five locations update the guide information on their internal systems every 30 minutes, to remove information about already-aired programs and provide information about current and upcoming programs. (A17307-09, A17284-85.)

But transmission of the updated information to subscribers' set-top boxes is not scheduled, nor coincident with the 30-minute update intervals. Rather, the guide information is transmitted at varying intervals, depending on (among other things) the length of time that it takes to process that information from the DIRECTV facility, through the DIRECTV system, and into subscribers' set-top boxes. (A17306-09.)

As of the date of trial, DIRECTV broadcast 1,670 programming channels to over 15,000,000 subscribers. (A17184, A17285.)

B. Finisar's Infringement Charge and DIRECTV's Evaluation

Mark Sausville, Finisar's former consultant, testified that in May 1997 he contacted Hughes Electronics, asking if Hughes would be interested in helping to commercialize the '505 patent. (A17080-82.) There was no evidence that Hughes (not a party here) ever received that communication, or that DIRECTV (a separate company) was aware of such a communication. (*See* A17936.) In 1997, neither Mr. Sausville nor Finisar alleged infringement by the DIRECTV system.

DIRECTV first learned of Finisar's infringement charge in early 2004, when it received a Finisar letter. (A23175-76, A17396-97.) That letter, sent after Finisar had re-hired Mr. Sausville to investigate his "intuition" that DIRECTV might be

using the patent's technology, indicated interest in negotiating a license.³

(A17082, A23175-76.) Although Mr. Sausville claimed "[s]everal hundred" hours investigating the DIRECTV system, the letter set forth only a generalized infringement allegation relevant to all 48 claims of the '505 patent. (*Id.*)

Finisar's letter included no claim chart, and identified only the "program guide broadcast by DirecTV [as] an example" of possible infringement. (A23175.) It did not specify guide components, or other aspects of DIRECTV, as allegedly infringing, nor did it say which of the patent's 48 claims were allegedly being infringed. DIRECTV twice, on March 17 and 29, 2004, requested further details, seeking (i) "more detailed or instructive information concerning the allegations set forth in [Finisar's] letter, such as claim charts" or at least "identification of the claim(s) and technologies which [Finisar] believe[s] are specifically at issue"; (ii) the "additional information" Finisar claimed to have "show[ing] that DirecTV is and had been using technology covered by the '505 patent in DirecTV's program guide broadcast"; or (iii) any other assistance in response to the "difficulty [DIRECTV was] having in determining which claim(s) [Finisar] assert[ed] to be relevant to what portion(s) of the DIRECTV technology." (A21017, A21019-20, A17400-01.)

³ Mr. Sausville's "intuition" had curiously changed; he had already concluded that DIRECTV does not perform the "basic value" of the patent—the delayed sending of information until the audience reaches a certain capacity so as to optimize revenue. (A17084.)

Responding on July 23, 2004—four months after DIRECTV sought this further information—Finisar confirmed that its charge was directed to the program guide (and in particular the original iteration, known as the “legacy” version), and that “at least claims 1 and 16 of the ‘505 patent” were involved. (A21021.) But Finisar did not, either then or anytime before suit, exclude any claims, or provide any application of any claim to any other system or method.

Despite Finisar’s recalcitrance, DIRECTV took Finisar’s charge seriously and had internal and external patent lawyers evaluate it. Internally, DIRECTV vice-president and associate general counsel John Crook (the DIRECTV officer responsible for responding to infringement charges) followed DIRECTV’s standard procedure by making a prompt assessment to determine whether to begin license negotiations because of possible infringement. (A17396-98, A17407-08.) To make his assessment, Mr. Crook ordered the ‘505 file wrapper, compared the claims to his knowledge of the DIRECTV system, and consulted with DIRECTV engineers including Robert Arsenault, vice-president of software engineering and a member of the team that developed the system. (A17303-04, A17398-17400.)

Having reached his initial assessment by March 2004 that DIRECTV was not violating Finisar’s patent rights and thus licensing negotiations would be unnecessary and inappropriate, Mr. Crook, that month, sought an independent evaluation from outside counsel, by which Mr. Crook could provide Finisar a

detailed response. (A17400-01.) The firm hired by Mr. Crook “specialize[s] in patent prosecution and client counseling, primarily in the electrical, software, and mechanical arts” (A17377, A17401), and Mark Zimmerman, the particular individual enlisted, is a licensed patent attorney with undergraduate and master’s degrees and awards in electrical engineering, as well as work experience in the satellite-communications-arts industry, including experience since 1996 evaluating the DIRECTV system. (A17377-78, A17385, A17392.)

Because Finisar’s letters identified only DIRECTV’s legacy program guide as possibly infringing, and did not eliminate any of the patent’s 48 claims, Mr. Zimmerman had to evaluate all 48 claims against that guide. (A17382.) Mr. Crook, “out of an abundance of caution,” instructed Mr. Zimmerman to also evaluate a later iteration of the guide (the “advanced” program guide). (A17378, A17380, A17382.) Accordingly, upon being hired, Mr. Zimmerman “refresh[ed]” his recollection of how the DIRECTV system works and studied the patent claims. (A17379, A17400.) He studied the claims by first “read[ing] the patent” to familiarize himself with its background section, the invention’s claimed “novel[ty],” and the prior art; then, he “g[o]t into the details” of the patent’s drawings and specification to “construe the claims.” (A17379-81; *see also* A24727, A17397 (discussing “to-do” list).) With this preparation, he “ultimately appl[ied] those claims to the accused system.” (A17379.)

During his evaluation, Mr. Zimmerman reached the initial conclusion that the patent was not “applicable to a television distribution system” (A17380), and he provided ongoing status reports to Mr. Crook and DIRECTV engineers. (A17383-84, A17403.) Thus, in June 2004, Mr. Zimmerman met with Messrs. Crook and Arsenault to discuss the patent and examine DIRECTV technical specifications more closely; at that meeting, Mr. Arsenault agreed with their assessments that the patent was unrelated to DIRECTV’s program guides. (A17379-80, A17403.) In September, following his detailed claim construction and further communications with DIRECTV engineers, Mr. Zimmerman again reported to Mr. Crook, indicating his availability to discuss his preliminary noninfringement conclusions. (A17380-83, A17405-06, A24836-38, A24713-14, A24668-87.) In December and January, Mr. Zimmerman corresponded again with DIRECTV engineers, obtaining edits to his program-guide technical descriptions for his final, written opinion. (A17383, A24858-61.) Throughout, Mr. Zimmerman understood Mr. Crook’s expectation “that the analysis . . . be done properly.” (A17384-85; *see also* A17398.)

Around the time of Mr. Zimmerman’s hiring, Mr. Crook had informed Finisar of the investigation and that he would promptly communicate with Finisar once the review was completed. (A21017.) Mr. Crook twice wrote Finisar in the months following about the fact of the ongoing review. (A21022, A23174.)

After a full analysis involving all 48 claims, and to memorialize that work, Mr. Zimmerman provided his written conclusions in a 55-page report on April 29, 2005; that delivery, which came roughly 14 months after his hiring, had been delayed by organizational changes at his small law firm. (A24567-24621, A17384.) Mr. Zimmerman set forth his descriptions of the two program-guide systems, claim construction, and application of the construed claims to the systems, noting that his work depended in part on “careful analysis of the ‘505 Patent and its prosecution history” and “numerous discussions and communication” with Mr. Crook, Mr. Arsenault, and other DIRECTV personnel. (A24568, A17384.)

As to his conclusion, Mr. Zimmerman “[c]onfirm[ed]” his earlier communications with DIRECTV, stating that “no claim of the ‘505 Patent is infringed” by the two program guides, and, as one example, noted that transmission of the program-guide information “is not assigned or scheduled,” as required by the patent. (A24568, A24570, A24572-73, A24577, A24604-06, A17384.) The report also noted that “[n]o inference should be drawn that we have an opinion as to the [patent’s] validity or invalidity.” (A24597; *see also* A17385.) Both Mr. Crook and Mr. Arsenault received the report; Mr. Arsenault “agreed with” it, and Mr. Crook found it “one of the most thorough and well-researched

and well-considered” opinion letters he had ever commissioned. (A17317, A17407.)

Without waiting for Mr. Crook’s promised response, Finisar filed this lawsuit on April 4, 2005. (A94.) Even then, DIRECTV remained unaware of the ultimate scope of Finisar’s allegations. Only several months later, when the local rules required disclosure of preliminary infringement contentions, did Finisar first suggest that its infringement claim reached far beyond DIRECTV’s legacy program guide. (A17402-03.) In response to Finisar’s lawsuit and those formal allegations, DIRECTV supplemented Mr. Zimmerman’s report with opinions of three other experts, who all opined that there was no infringement or that the claims-in-suit were invalid. (A22909-65, A11750-12261.)

C. The Trial Evidence

1. Finisar’s Case on Literal and Willful Infringement

Finisar presented its infringement case through its expert Roy Griffin. Regarding willfulness, Finisar presented no testimony, expert or otherwise, attacking the substance of Mr. Zimmerman’s noninfringement opinion. Its case instead relied on the suggestion that 431 days was too long to prepare the opinion letter, and cross-examination of Mr. Zimmerman inquiring whether (1) he was asked to update his opinion to cover aspects of DIRECTV’s system not originally charged with infringement by Finisar, or take into account the court’s *Markman*

ruling (issued almost a year later); (2) one of the documents he received was an “outdated tutorial”; (3) his opinion also addressed invalidity; and (4) he was qualified to render an opinion because he never personally designed satellite-television systems. (A17385-92.)

Prior to trial, the court ruled that DIRECTV could not respond to Finisar’s willfulness charge with evidence of Mr. Crook’s personally-held noninfringement views, on the ground that DIRECTV should have disclosed those views pursuant to a local patent rule (3-8⁴) governing “[p]roduc[tion]” and “copying” of “opinion(s) and any other documents” relevant to a willfulness charge. (A115, A18058.)

2. DIRECTV’s Invalidity Evidence

DIRECTV introduced the 1983 *Videotex Architecture* textbook (A23982-24276) as anticipation evidence because the textbook, itself, discloses a hierarchically indexed system for distributing data by the method claimed.

DIRECTV also introduced five additional pieces of prior art showing that, even if the textbook were not anticipatory (and it is), the claims-in-suit are obvious over the prior art.

DIRECTV also presented Dr. Gary Tjaden, who met (and exceeded) the court’s definition of one of ordinary skill in the art and testified as to invalidity. (A17465-71.) Finisar responded with the testimony of Doug Eaton, who lacked

⁴ Rule 3-8 was recently renumbered as Rule 3-7. E.D. Tex. Patent R. 3-7 (2006). This brief adheres to the original numbering.

those qualifications, and who admittedly did not apply that skill level in his testimony. (*Compare A4 with A17548* (conceding that he “do[es]n’t have these qualifications”).) Instead, Mr. Eaton “[a]bsolutely” approached his testimony using his experience in teletext, and discounted the textbook in conclusory fashion because, in his view, the textbook departed from teletext procedures and aspects familiar to him. (A17554.)

SUMMARY OF ARGUMENT

I. The DIRECTV system does not store a “library” or database of information. While someday television programming may be stored on a server and retrieved on demand by a cable, broadband, or satellite subscriber, that is not how the accused DIRECTV system operates. Instead, most programming received and decoded by a DIRECTV set-top box and then displayed on the subscriber’s television set is simply passed through the DIRECTV system from content providers like CNN, HBO, and ESPN. This undisputed fact demonstrates noninfringement.

As DIRECTV proposed, a proper construction of “information database” requires a searchable and retrievable collection of electronic information. The streams (channels) of data passed through in real-time by DIRECTV from third-party content providers would not meet that requirement.

Likewise, DIRECTV's proposed construction of "downloading into a memory storage device" properly requires the set-top box to retain that information for later use or retrieval. DIRECTV does not meet that requirement because the accused buffer in the set-top box only holds that information transiently (fractions of a second) for technical conversions necessary for real-time viewing, and does not allow later viewing or use.

II. Even applying the court's constructions, DIRECTV does not literally infringe. Under the court's construction of the "scheduling" step, "each" portion of the broad "information database" selected for transmission must be scheduled for transmission by assigning it one or more scheduled transmission times. The evidence showed that DIRECTV schedules only a small minority (roughly 3%) of the transmitted portions of the alleged database.

III. Also striking was the court's refusal to grant JMOL of anticipation in the face of a 1983 textbook, *The Architecture of Videotex Systems*. That reference, without any genuine dispute, discloses every element of every asserted claim. The court's refusal was based not on any shortcoming of the objective evidence of anticipation (and obviousness) in that textbook, but instead on the court's subjective and irrelevant theory that DIRECTV's expert's jury presentations (tailored to communicate to the non-technical jury members) were not themselves clear and convincing.

IV. The court also erred in denying DIRECTV's motion for JMOL of non-willfulness or at least a new trial. No reasonable jury could have found willfulness here; certainly not by clear-and-convincing evidence. Based on its reasonable (indeed, proper) claim construction and its understanding of the fundamental differences between the patent and its system, DIRECTV had sound reason to believe that it was not violating Finisar's rights. The bases identified by the court for sustaining the willfulness verdict—that Mr. Crook did not explain his own personally-held noninfringement views (which the court had improperly excluded from evidence); Mr. Crook did not discuss the evaluation with DIRECTV's board of directors; DIRECTV did not implement a design-around *in addition to* forming opinions of noninfringement; the final opinion letter took too long to produce; and the opinion addressed infringement but not *also* invalidity—are each contrary to law, with unfortunate ramifications beyond this case for expected corporate behavior. The court compounded the error by awarding a punitive enhancement based on the willfulness verdict without any finding of reprehensible conduct, as constitutional due process requires.

Finally, the court erred in denying DIRECTV's new-trial motion based on the court's misapplication of a local rule in improperly excluding Mr. Crook's noninfringement views. That evidence would have further demonstrated

DIRECTV's reasonable patent interpretation and its good-faith reliance (before suit) on counsel's conclusions, precluding a willfulness finding.

STANDARDS OF REVIEW

Denial of a JMOL motion is reviewed *de novo*. *Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1248 (Fed. Cir. 2005). JMOL is appropriate when “a reasonable jury would not have a legally sufficient evidentiary basis to find for the [nonmoving party] on that issue.” Fed. R. Civ. P. 50(a)(1).

Claim construction, too, presents a question of law reviewed *de novo*. *Cybor Corp. v. FAS Techs.*, 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc).⁵ Literal and willful infringement are questions of fact (the latter requiring clear-and-convincing evidence), as is anticipation (also requiring clear-and-convincing evidence); those questions are reviewed for substantial evidence. *Roton Barrier, Inc. v. Stanley Works*, 79 F.3d 1112, 1125 (Fed. Cir. 1996); *SRI Int'l v. Advanced Tech. Labs.*, 127 F.3d 1462, 1465 (Fed. Cir. 1997); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1323 (Fed. Cir. 2002). “Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363 (Fed. Cir. 2004) (quoting *Consol. Edison Co. v. NLRB*, 305 U.S. 197,

⁵ Claim construction here was performed as a matter of law, entirely on the intrinsic record, and so it would be inappropriate to apply any other standard of review, even if *Cybor* were overruled. See *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 469 F.3d 1039 (Fed. Cir. 2006).

229 (1938)). Obviousness is a question of law; the ultimate conclusion is reviewed *de novo* while the underlying factual findings (requiring clear-and-convincing evidence) are reviewed for substantial evidence. *Teleflex*, 299 F.3d at 1323.

Denial of a motion to amend the judgment, or for a new trial, is reviewed for abuse of discretion. *Elementis Chromium L.P. v. Coastal States Petroleum Co.*, 450 F.3d 607, 610 (5th Cir. 2006); *Shows v. Jamison Bedding, Inc.*, 671 F.2d 927, 930 (5th Cir. 1982). The same standard applies to enhanced-damages and evidentiary rulings. *SRI Int'l*, 127 F.3d at 1468-69; *Roton Barrier*, 79 F.3d at 1122. A court necessarily abuses its discretion by committing legal error. *Martin v. Franklin Capital Corp.*, 126 S. Ct. 704, 710-11 (2005). Constitutional-law questions, *e.g.*, whether a punitive award violates the Due Process Clause, are reviewed *de novo*. *Cooper Indus. v. Leatherman Tool Group*, 532 U.S. 424, 431 (2001).

ARGUMENT

I. THE COURT GAVE TOO BROAD A CONSTRUCTION TO THE TERMS “INFORMATION DATABASE” AND “DOWNLOADING INTO A MEMORY STORAGE DEVICE”; UNDER CORRECT CONSTRUCTIONS, DIRECTV IS ENTITLED TO JMOL

The court erred in too broadly construing two terms.

First, the court erred in construing “information database” to mean merely “a collection of information which can be accessed,” without also requiring that the information can be searched, retrieved, or selected out of that “database.” This

construction went far beyond the term's ordinary meaning and the examples and teachings of the patent specification, and imposed an essentially boundless meaning upon "database." This allowed the court's construction to cover any information that could be accessed in any way, even if the information is not individually identifiable, searchable, or retrievable. This improper breadth was neither hypothetical nor harmless, for it allowed Finisar to argue that even unparticularized streams of digital information passing through DIRECTV's uplink centers and satellites (*e.g.*, program streams from content providers) could comprise a "database" as recited in the claims.

Second, the court erred in construing "downloading into a memory storage device" so broadly that even data fleetingly held for processing in real-time viewing could be said to be "downloaded."

Correction of either error compels JMOL for DIRECTV. Each term appears in *all* claims-in-suit, making each erroneous construction dispositive of the appeal. Moreover, where, as here, a claim construction is erroneous and no reasonable jury could find infringement under the proper construction, JMOL without remand is appropriate. *Harris*, 417 F.3d at 1255-57; *see Boyle v. United Techs. Corp.*, 487 U.S. 500, 513 (1988).

A. The Court Erroneously Construed “Information Database”

An “information database” is required by every asserted claim. In claim 16 alone, “information database” appears eight times in five steps. (A150 (21:34-57).) The court thus appropriately described “information database” as one of the “most important” terms in the patent. (A17673; *see also* A133, A140 (2:52-56).)

The court construed “information database” to mean “a collection of computerized information which can be accessed.” (A8.) That construction was based primarily on Finisar’s proposed construction of “a collection of information.” (A7, A17674.) The court added the “which can be accessed” requirement ostensibly to ensure that its construction did not include computerized information “that has been deleted but is still floating around there” so that only “a forensic expert might be able to bring it back up.” (A7, A17674, A17685.) Still, that construction was wildly overbroad.

The specification requires the database to be searchable and retrievable.

Claim terms “are generally given their ordinary and customary meaning.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal quotation marks and citation omitted). That is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at 1313. “[T]he best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history.” *Id.* at 1315

(internal quotation marks and citation omitted). “In some cases, the ordinary meaning . . . may be readily apparent even to lay judges,” thus requiring “little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314.

The specification teaches that the ordinary, *complete* meaning of “information database” requires more than mere “access” to information. “Information database” requires a “database” that can be searched so that specific files (or other units of “information”) can be retrieved—*i.e.*, selected—out of the “database.” Prior to and during the *Markman* hearing, DIRECTV suggested various verbal formulations for this construction—each emphasized the fundamental searchability/retrievability requirement (A414-15, A17691); each was rejected.

The specification teaches that, as with a “library” (A140 (2:14)), the patent’s supposedly inventive premise is that a user can quickly obtain specific desired data files kept in a large database. As the specification describes, a user has “reasonably quick access to *all the contents* of the large database” through automatic transmission of information, and “timely” access to additional information that can be “retriev[ed]” on request. (A140 (1:46-50), A140-41 (2:65-3:12), A141 (4:14-17, 4:55-58), A142 (5:6-21, 5:66-6:6); *accord* A133.)

To permit such “quick access,” the specification acknowledges that the database is made up of specific files that can be searched and retrieved. Thus, “[f]or the purposes of transmission, the database is broken into data packets.” (A146 (13:24-25).) These packets are “hierarchically organized using a set of assigned indices to reference *each distinct portion*” of the database. (A146 (13:22-24).) With each item in the database “tag[ged]” with an index, the patent provides for “keyed or indexed access to all data within the database.” (A140-41 (2:52-56, 4:52-55); *accord* A142 (6:31-36).) Such hierarchical organization and structure facilitates the efficient search and retrieval of *specific* information. Even the court acknowledged that the organization permits users to “access . . . various *parts* of the database.” (A7.)

In describing the “information database” as akin to “the main library of a major university, such as Yale or Harvard University, having stacks containing several million volumes of books” (A140 (2:14-17)), the specification further demonstrates the searchability/retrievability requirement. While each library patron would have “access” to the entire collection, the amount of data available to each patron at any single time “is much more limited”—*i.e.* the patron may borrow “particular book[s] (file[s] or program[s]).” (A140 (2:9-23).) And, of course, a large collection of books without any means to search and retrieve desired books within the collection is not an “information database”; it would be nothing more

than an undifferentiated collection of information, and certainly would not facilitate borrowing “on relatively short notice.” (A140 (2:21-22).)

All of these uses and descriptions of “information database” confirm that such a database requires more than bare accessibility; the database must be searchable so that specific data in the database can be retrieved for use.

The plain meaning of “database” requires searchability and retrievability.

One of ordinary skill (even a layperson) would understand that an “information database” must be searchable, and its contents retrievable.

This ordinary meaning is borne out in dictionary definitions, which explicitly define “database” as a collection of data that is usable because the collection is organized, searchable, and retrievable. (See A735-65.) Dictionaries current at the time of the ‘505 application define “database” as “[a] collection of data *arranged for ease and speed of search and retrieval*,” thereby requiring searchability and retrievability. (A762; accord A741, A765.) Even *Finisar*’s dictionary definitions, the court noted, incorporate similar concepts. (A17685, A515 [

].) Nonetheless—and despite the court’s own recognition in colloquy that the database must be “usable” and “search[able]” (A17674, A17683)—the court included *no* limitation related to organization, searchability,

and retrievability. The addition of “which can be accessed” failed to accomplish that.

The court’s reasons for rejecting DIRECTV’s construction were erroneous. In rejecting the searchability/retrievability requirement of DIRECTV’s constructions, the court assumed that a jury would inappropriately view that requirement as something “like a Google search . . . or a Lex[i]s or WestLaw search” that is “completely searchable”—*i.e.*, where the subscriber “can search for any kind of word . . . down to individual words, phrases, sentences,” such as the “particular frame” in *Gone with the Wind* “where [Rhett Butler] says, ‘I don’t give a damn.’” (A17684-85.) But DIRECTV’s proposed construction was not “*complete* searchability,” and in leaving “searchability” out of its construction entirely, the court—illogically—declined to require the lesser, and proper, requirement of searchability of files within the collection. (A17684, A7-8.) That was not a proper basis for rejecting DIRECTV’s proposed construction.

The error was harmful. The court’s rejection of the searchability/retrievability requirement was not harmless. At trial, DIRECTV’s expert logically had to agree that the court’s broad construction was satisfied by DIRECTV’s streams or channels of digital programming, because subscribers can “access” them (within the normal meaning of that term) simply by tuning in to watch. (A17335.)

Finisar itself rendered the error lethal. At trial, Finisar's Mr. Griffin testified that DIRECTV is "*just* a collection of information" that is "computerized and can be accessed," and so DIRECTV has an "information database." (A17125.) On cross-examination, he testified likewise: "[A]ccording to the claim construction, the information database *only* requires that data be stored and accessible. And, so, there is a great deal of information that is stored and accessible at DIRECTV; and that would be part of the information database." (A17149.) Finisar's cross-examination of DIRECTV's expert Dr. Martin Rinard similarly emphasized that DIRECTV has an "information database" under the court's construction. (A17360.) Indeed, Finisar repeatedly hammered the point. (*See* A17361.)

Finisar could not prove infringement under a proper construction. Under the correct construction of "information database," no reasonable jury could find infringement. In DIRECTV, what the subscriber has access to is a constantly changing stream of all audio, video, and guide data available only as that stream passes through the set-top box; a customer cannot send requests for particular programs or information. Finisar's expert acknowledged this. (A17119.) As a DIRECTV engineer explained, "There is no way for the [set-top] box or DIRECTV to . . . bring you a particular program that the customer selected. The most [DIRECTV] can do is tune the channel"—locate the *delivery path*.

(A17306.) That path, unlike the contents of a library, cannot be searched, nor can information be selectively retrieved; the viewer simply gets what is there.

B. The Court Erroneously Construed “Downloading Into A Memory Storage Device”

The “downloading” step recites: “at each subscriber station, downloading into a memory storage device those of said received data packets which match said specified set of requested data packets.” (*E.g.*, A150 (21:65-68).) Through the two “said” phrases, the “downloading” step explains that, from the packets that are transmitted to and received by the subscriber station, the particular packets that match those requested by the subscriber or subscriber station (A17997) are downloaded into a memory storage device on the subscriber’s computer.

The court construed the phrase “downloading into a memory storage device” to require only “*transfer[ring]* into a memory storage device.”⁶ (A17.) That construction, which Finisar advanced (A407), was impermissibly overbroad.

The specification requires that “downloaded” information be retained for later use or retrieval. The specification makes clear that “downloading” requires more than mere *transfer*. It requires that the information be *retained*, to thereby permit preservation, later use, or retrieval. DIRECTV thus proposed formulations

⁶ In full, the court construed the “downloading” step to mean: “[at each subscriber station,] the data filter transfers into a memory storage device the data packets specified in the filter data.” (A17.)

that appropriately require retention. (A425, A17712 (reformulation addressing issues not relevant here).)

As the specification explains, the claimed invention improves upon the publication and distribution of information in hard copy or on compact disks. In distributing information digitally, the patent eliminates the costs of “printing either CDs or traditional books, plus similar costs for the physical distribution.” (A140 (2:24-43), A146 (14:43-51).) To serve as a viable alternative, the patent’s digital-transmission method necessarily requires the same availability associated with CDs and books—*i.e.*, the digitally-transmitted information can be retained for later use.

The retention requirement is further confirmed by the specification’s explanations and diagrams showing how the claimed invention operates. Data packets are received at subscriber stations, and “those data packets that meet selection criteria defined” by the subscriber station are “downloaded into the memory 122-124 of the subscriber’s workstation or other computer.” (A142 (5:27-33); *accord* A143 (8:37-42).) Figures 3 and 4 depict the subscriber-station memory storage device 124; Figure 3 further shows that the particular data area 161 in memory 124 is “reserved for downloading information.” (A135, A143 (8:57-60).) Once “downloaded,” the packets are “on[] the subscriber’s host computer.” (A145 (11:45-46); *accord* A145 (11:67-68).) In other words, the data is transferred to a memory storage device for *retention* to permit later use, just as a

library book is available to a library patron at some length, and certainly beyond the moment it is viewed on the shelf. (A140 (2:14-23).)

The specification's reference to "video cassette recorder[s]" further confirms the retention requirement of the "downloading" step. (A148 (17:16).) The specification acknowledges that some subscribers, notwithstanding the vast amount of information in the database, "will be interested solely in receiving video programming"; for these subscribers, the memory storage device "will actually be a data storage box which operates in much the same manner as a conventional video cassette recorder." (A148 (17:11-16).) Storage of programs in that box permits "later viewing by the user"—retention. (A148 (17:25-26).)

The plain meaning of "downloading" requires retention for later use or retrieval. Bolstering the specification is the "widely accepted meaning" of "downloading." *Phillips*, 415 F.3d at 1314. No person of ordinary skill in the art would understand "downloading" to include transferring data merely so that it is available for real-time viewing with no possibility of later use or retrieval by the user. As other district courts have recently held, "downloading" requires more than mere data *transfer*. See *Skyline Software Sys., Inc. v. Keyhole, Inc.*, No. 06-10980-DPW, 2006 U.S. Dist. LEXIS 83603, at *6-8 (D. Mass. Nov. 16, 2006) (rejecting a proposed construction for "downloading" of "transferring," because "the data must be received" and "[u]se of the term 'transferring' would, by

contrast, be ambiguous”); *Ethos Techs., Inc. v. RealNetworks, Inc.*, 462 F. Supp. 2d 131, 137 (D. Mass. 2006) (limiting the construction of “download[ing]” to the transfer of “data capable of being *stored*”).

The court’s reason for rejecting DIRECTV’s construction was contrary to the term’s ordinary meaning. The court’s view that a retention requirement would have been “surplusage” appears based on a misunderstanding that the parties agreed “downloading” meant “transferring.” (A17713, A17.) DIRECTV’s construction of the “downloading” step *used* the word “transfer,” but it further required “retention.” (A425.) That additional retention requirement was far from “surplusage.”

Finisar’s own statements at the *Markman* hearing demonstrate that “transferring,” without a retention requirement, is *not* synonymous with “downloading.” Applying the court’s too-broad construction, Finisar urged that “downloading into a memory storage device” would be satisfied by information that “simply touch[es]” the receiver and is “immediately turn[ed] . . . around.” (A17713-14.) While that might satisfy “*transferring* into a memory storage device,” such fleeting contact does not amount to “*downloading* into a memory storage device.” In failing to construe the term to prevent such an impermissibly broad application of the step, the court erred.

The error was harmful. Under the erroneous construction, Finisar was able to argue, through Mr. Griffin, that the accused buffer in the DIRECTV set-top box, by being (without dispute) “*just . . . a temporary holding place for information,*” performs the “downloading” step. (A17122, A17998.) Mr. Griffin again relied on the court’s too-broad construction when he testified that the “downloading” step is satisfied by the buffer’s merely temporary “stor[age]” of audio and video data until “turn[ing] it into the audio and video that goes out of your cable to your television.” (A17140.)

Finisar could not prove infringement under a proper construction. Under a proper construction, no reasonable jury could find that the accused buffer in the set-top box (the alleged subscriber station) infringes. Unlike the claimed memory storage device, which effectuates the patent’s purpose of quickly distributing requested information to subscribers, DIRECTV’s buffer fleetingly holds data only for technical purposes (*e.g.*, processing the data into a format viewable in real-time for a television set) until the data quickly passes through the subscriber’s unit and out again. (A17098-17100.) While the buffer necessarily has “memory” to hold the data while those functions are performed, that fleeting contact is not “downloading into a memory storage device” and does not lead to the stated contribution of the patent. Under a correct construction, therefore, no reasonable jury could find that DIRECTV “download[s] into a memory storage device.”

JMOL of noninfringement is required.

II. BECAUSE DIRECTV DOES NOT ASSIGN “ONE OR MORE SCHEDULED TRANSMISSION TIMES” TO EACH PORTION OF THE INFORMATION DATABASE SELECTED FOR TRANSMISSION, DIRECTV IS ENTITLED TO JMOL

To literally infringe a method claim, “the accused device must literally meet each and every one of the claim limitations.” *Desper Prods. v. QSound Labs*, 157 F.3d 1325, 1337 (Fed. Cir. 1998). Even accepting the court’s construction *in toto*, DIRECTV does not literally infringe (and Finisar dropped any equivalents claim, so that issue is out of the case), because it does not perform a step required by every claim-in-suit: “scheduling transmission of selected portions of said information database, including assigning each selected portion of said information database one or more scheduled transmission times.” (*E.g.*, A150 (21:44-47).)

Under the court’s construction, the phrase “selected portions of [the] information database” means “*each* part of the information database selected for transmission.” (A14.) That construction thus requires “scheduling transmission of” “*each* part of the information database selected for transmission.” *See Georgia-Pacific Corp. v. U.S. Gypsum Co.*, 195 F.3d 1322, 1331 (Fed. Cir. 1999) (“Unless the patent otherwise provides, a claim term cannot be given a different meaning in the various claims of the same patent.”).

Here, the word “each” is critical. “[E]ach” is “a dominant word and does not admit of question.” *Leroux & Co. v. Merchs. Distilling Corp.*, 165 F.2d 481,

482 (7th Cir. 1948). With respect to patent language, this Court (and others) have consistently held that “each” means “every” or “all.” In *Seachange International v. C-COR Inc.*, 413 F.3d 1361, 1368, 1378 (Fed. Cir. 2005), this Court described a claim reciting “interconnecting *each* one of said processor systems through a network for data communications with *each* other one of said processor systems” as requiring that “*every* processor be connected to *every* other processor” (original emphasis omitted).⁷

In view of the court’s construction, and of Finisar’s election to drop any equivalents claim, Finisar, to prove direct, literal infringement, had to show that *every* portion of the alleged vast “information database” that is “selected for transmission” is in fact “scheduled” (verb) for transmission and assigned a scheduled transmission time—by DIRECTV. As Finisar’s expert told the jury, the court’s construction makes “parts of th[e] database I want to transmit” wholly synonymous with “parts I want to schedule.” (A17132.)

At trial, Finisar identified what DIRECTV broadcasts as the portions of the database “selected for transmission”—*i.e.*, turnaround programming, playback programming, conditional-access information, and program-guide information.

⁷ See also *Synvasive Corp. v. Stryker Corp.*, 425 F. Supp. 2d 1105, 1115-16 (E.D. Cal. 2006) (“each” is “‘all considered one by one’” (quoting WEBSTER’S THIRD NEW INT’L DICTIONARY 713 (4th ed. 1976))); *Microstrategy, Inc. v. Business Objects, S.A.*, 331 F. Supp. 2d 432, 440-41 (E.D. Va. 2004); *Medtronic, Inc. v. Guidant Corp.*, No. CIV-00-1473, 2004 U.S. Dist. LEXIS 10020, at *116-18 (D. Minn. May 25, 2004).

(A17124-25, A17127, A17132-33, A17150.) But the uncontroverted facts show that DIRECTV does not “schedule” (verb) each of those portions. Indeed, little of what DIRECTV transmits (roughly 3%) is “scheduled” by DIRECTV or anyone in its control; the remainder is transmitted by DIRECTV on a *non*-scheduled basis.⁸ To the extent Finisar even presented a case on each of those portions, Finisar relied on the irrelevant fact that DIRECTV *uses* schedules (noun) in its system. (A17132-33.)

Turnaround programming is programming that DIRECTV receives from third-party content providers such as CNN, HBO, and ESPN, and is the overwhelming majority—97%—of the alleged “information database.” (A17285, A17287, A17324.) The content providers control scheduling of that programming. (A17287, A17307, A17324.) DIRECTV “has no say over” when that content is scheduled for transmission; the channels “come in; they go out. DIRECTV just turn[s] them around,” sending the programming “right back out to [its] customers.” (A17285, A17287, A17296.)

This is exactly as one would expect. Companies like CNN, HBO, and ESPN, which “broadcast . . . to many” cable and satellite television-broadcast systems in addition to DIRECTV (A17285), would hardly allow an individual

⁸ The providers schedule programming independently of DIRECTV, and Finisar presented no evidence that DIRECTV and the providers have “an agreement to work together or a partnership or the ability of one to control another” with respect to scheduling that programming. (A17596.)

system to control or alter the scheduled transmission of their channel. Thus, DIRECTV is “not permitted to take ‘Larry King Live’ and, say, choose to broadcast at a different time than CNN decides to broadcast it to” DIRECTV. (A17287; *see also* A17306 (DIRECTV cannot play regularly-scheduled program when content provider preempts that program).) Simply put, the “most” that DIRECTV “can do is tune the channel; and then [it’s] hoping for the best, that [the providers] are doing what they publicly said they would do.” (A17306, A17313.)

Playback programming is material that “has been recorded, and [DIRECTV] play[s] it out at the time that the program is intended to be played out”—such as pay-per-view programming. (A17288.) Transmission of this fraction of the information database (roughly 3% (A17285)) *is* “scheduled” (verb) by DIRECTV—but only this portion.

Conditional-access information authorizes subscribers to receive the programming they have paid for, and encrypts and decrypts the channels to prevent unauthorized access. (A17289-91.) That information is transmitted at varying *unscheduled* intervals depending upon what happens at various controllers and other processors. (A17286, A17291, A17296; *see also* A17307-09.) Finisar did not even try to show otherwise. (A17131-33.) Admitting that he “didn’t talk about all of the groups” selected for transmission, Finisar’s Mr. Griffin specifically acknowledged that he “didn’t focus on the conditional access.” (A17153.)

Program-guide information, the only aspect of DIRECTV referenced in Finisar’s pre-suit charge letters, allows subscribers to find out when a show will be broadcast and to tune to a channel to view that show. (A17305.) DIRECTV does not “schedule” the transmission of this guide information to subscribers’ set-top boxes. Rather, the guide “is always being broadcast more or less continuously, and there is no attempt to make any part of the guide be broadcast at any particular time.” (A17330, A17306.) Although data for the program guide is *updated* within DIRECTV’s facilities every 30 minutes, such updating is insufficient for literal infringement because the claim requires “scheduling *transmission*,” and the updating that goes on at DIRECTV’s facilities does not coincide with the data’s transmission to set-top boxes, which is not “in any kind of planned fashion.” (A17307-09, A17338-39; *cf.* A17133.) As a result, DIRECTV “never schedule[s] transmission times for any program guide data that [it] transmit[s].” (A17309.)

In sum, Finisar had to show that DIRECTV “schedules” (verb) the transmission of *every* portion of the “information database” selected for transmission (*i.e.*, everything broadcast by DIRECTV), and that such “scheduling” included the step of assigning each portion at least one specific transmission time. Finisar’s burden was insurmountable and insurmounted—the most that could be said is that DIRECTV schedules the transmission of some fraction (roughly 3%) of

the “information database”: playback programming. JMOL for DIRECTV is warranted.

III. BECAUSE PRIOR ART INVALIDATES THE CLAIMS-IN-SUIT, DIRECTV IS ENTITLED TO JMOL

A. *Videotex Architecture* Anticipates All Of The Claims-In-Suit

A prior-art reference anticipates a patent claim if it expressly or inherently discloses each claim step. *Celeritas Techs. v. Rockwell Int’l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998). Thus, where a single reference “speaks for itself” and clearly “discloses each of the claimed limitations, the claims are anticipated,” warranting JMOL. *Id.* (reversing denial of JMOL, because “no reasonable jury could have determined that the . . . article did not anticipate the claims of the patent”); *Arthrocare Corp. v. Smith & Nephew, Inc.*, 406 F.3d 1365, 1371, 1374 (Fed. Cir. 2005) (JMOL warranted if the evidence “clearly established” the disclosures). Moreover, where clear-and-convincing evidence of anticipation exists, challenges to “the veracity of [the invalidity] expert and . . . his conclusions” are irrelevant. *Arthrocare*, 406 F.3d at 1374.

Here, there is nothing new about the claims-in-suit; each does no more than claim what was long known and used in the scheduling, transmission, and receipt of database information in digital communication systems using a hierarchical structure and organization. And it is all set forth in the *Videotex Architecture* (1983) textbook (A23982-24276, A17483), which was not before the PTO during

‘505 patent prosecution. (A133, A17056.) *See SIBIA Neurosciences v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1355-56 (Fed. Cir. 2000) (noting that “alleged infringer’s burden may be more easily carried” for reference not before PTO). Everything—*everything*—in the claims-in-suit is disclosed there, in the configuration claimed: This can be seen in the chart at pp. 50-51, *infra*, discussion here of claim 16 in particular, and the hyperlinked record materials referenced.

Claim 16 (and the identical steps in claims 39 and 44 (*see* n.2, *supra*)) requires an information-transmission method that (a) stores an information database on memory devices, (b) generates and stores a hierarchically arranged set of indices for referencing data in the database, (c) schedules transmission of the selected portions and assigns scheduled transmission times, (d) transmits a stream of data packets in accordance with scheduled transmission times, (e) divides the selected portions into a prioritized set of tiers transmitted at a corresponding repetition rate that is higher for higher-priority tiers, (f) receives the transmitted stream of data packets at subscriber stations, (g) stores filter data, which specifies a set of requested data packets comprising a subset of the transmitted data packets, and (h) downloads requested data packets into memory storage devices. (A150 (21:34-68).)

The textbook discloses each of those requirements. Specifically, like the preamble in claim 16, *Videotex Architecture* teaches an information transmission

method that will “upgrade today’s mass communication media into computerized mass information utilities.” (A23996.) The textbook describes the “Transmission Sequence” (A24174-75), and, in Figure 6.8, shows an “[e]xample of combining transmission media.” (A24077.)

Like 16(a) and (b), the information is stored in a “database” and referenced by distinct and hierarchically arranged indices also stored in the database. Thus, the textbook describes “Service-Provider Terminals” that create, edit, and store information in a “data retrieval system” that is “centered around the heavy use of databases.” (A24006-07, 24014, 24077, 24160; *see also* A17485.) The videotext database “incorporate[s]” a hierarchically arranged set of indices for referencing distinct portions of the videotex database, to permit “searching in the database.” (A24167-69; *see also* A17485-86.) Figure 10.1 shows that the indices, such as index 0.0 and index 1.0, are distinct and refer to portions of the database that are distinguishable from one other. (A24168.)

Like 16(c) and (d), selected portions of the database are scheduled for transmission, assigned transmission times, and transmitted in packets in accordance with the scheduled times. (A24077, A24150-53 (including Figures 6.8, 9.2, 9.4).) Figure 10.5(b) shows that portions of the videotex database (on-line pages, scheduled off-line pages, pages transmitted on demand, and “real-time” pages) are transmitted at different times, slots are reserved, and each portion is

assigned one or more scheduled transmission times and inserted into the slots for transmission as scheduled; scheduling and assigning are further disclosed by the ability to “control[] the repetition rate of transmitted pages” and “transmit[] at precisely known times.” (A24174-75; *see also* A24258, A17486-92.) Figure 6.8 likewise shows that the “H[ead] E[nd]” transmits data packets—“units of computerized information of determinable length” (A17997) because, for example, “[e]ach data line . . . has a fixed format, consisting of the page number, row number, and the characters of that row” (A24151)—to the “U[ser] T[erminal]” in accordance with scheduled transmission times, such as those shown in Figure 10.5(b). (A24077, 24175.) The scheduled transmissions are unaffected by transmission of the irregular off-line pages, which can be transmitted on a different television scan line. (A24174-75; *see also* A17491-92.)

Like 16(e), the textbook divides the selected portions into a prioritized set of tiers and transmits those portions at different repetition rates corresponding to priority. Thus, the textbook divides the on-line pages, scheduled off-line pages, demand pages, and “real-time” pages into a prioritized set of tiers, noting, for example, that “[a] few hundred pages of general interest can be repeated in a short cycle, whereas less important or less frequently updated pages are inserted in hourly or even daily intervals into specific slots in the cycle.” (A24174; *see also* A24258.) Figure 10.5(b) shows the scheduling of at least two prioritized tiers,

where the off-line cycle is lower priority and the on-line cycle higher priority, and only one slot of information is transmitted from the off-line cycle for every revolution of the on-line cycle. (A24175.) These repetition rates are unaffected by transmission of the irregular off-line and demand pages because slots in the on-line cycle are reserved to receive the demand pages, and the irregular off-line pages can be transmitted on a separate television scan line. (A24174-75; *see also* A18492-93.)

Finally, like 16(f), (g), and (h), a receiver at the user's location receives the data packets and uses filter data to select packets requested by the user, so that the requested data can be downloaded by the user for viewing or use at a later time. Figure 9.2 shows that the user terminal's "[d]ata selection" receives the transmitted stream of data packets, and, like the patent, "selects those demanded by the current user command" by comparing the page indices of the received data packets with the packets requested by the user, and then transfers the matched packets into a memory storage device such as the "[d]isplay memory." (A24150-53; *see also* A24167, A17494-95.)

The court seemed to recognize the textbook's strength as evidence of anticipation. On reviewing DIRECTV's summary-judgment motion of anticipation based on *Videotex Architecture* (A3333-49), which the court "carr[ied]" through trial, the court described the anticipation issue as "very, very

close, very close.” (A17884.) After trial, the court stated that “it certainly seemed that a case for anticipation might have been made.” (A17934.)

Nevertheless, the court denied DIRECTV’s JMOL motion—but without citing to *any* disclosures missing from the book. Rather, the court denied JMOL because it found neither party’s *experts* “clear and convincing,” and because “to the jury there were parts of [the textbook] that were not charted or mentioned by Dr. Tjaden” and he used summary and animated demonstratives to communicate technical complexities to the jury. (A17934-35.) The court even stated that the jury might have reached an invalidity verdict if DIRECTV had used “a different presentation or different cross examination.” (A17937.) But the court’s subjective evaluations of expert presentations and whether the jury valued those presentations do not address—much less overcome—the objective, undisputed, clear, and convincing *evidence* of *Videotex Architecture* itself, which was before the jury in full and establishes anticipation. *See Celeritas*, 150 F.3d at 1361; *Arthrocare*, 406 F.3d at 1374. Indeed, this Court has held, directly on point, that discounting an expert’s presentation “does not eliminate *the reference itself* as evidence or its uncontradicted disclosure.” *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 632 (Fed. Cir. 1987) (reversing denial of JMOL of anticipation).

Nor could the court have been persuaded by Finisar’s case, presented through Mr. Eaton, because nothing in Finisar’s case countered DIRECTV’s clear-

and-convincing anticipation evidence. For one, the textbook is anticipation evidence that “speaks for itself, and . . . discloses” all of the claimed elements (*Arthrocare*, 406 F.3d at 1374), regardless what Mr. Eaton claimed at trial (or in his two-page report on *Videotex Architecture* (A17550)). For another, given that the body of anticipatory evidence was defined—*i.e.*, the textbook—the only question was how that evidence would have been viewed by one of ordinary skill at the time of the invention, and Mr. Eaton did not even purport to provide that perspective. Instead, he admitted that he (i) “[a]bsolutely” evaluated the textbook based on his experience with teletext systems, rather than by evaluating the prior art on its own terms (A17554), and (ii) does not possess even the minimum qualifications of one of ordinary skill. (*Compare* A4 with A17548.)

Even if Mr. Eaton had testified from the relevant perspective, his testimony still would have been beside the point because, for those limitations he purported to challenge, he ultimately did not dispute their disclosure in the textbook. (Mr. Eaton did not address steps 16(a), (b), (f), (g), and (h) at all. (A17550.)) For instance, on claim 16’s scheduled-transmission-time and repetition-rate requirements, Mr. Eaton’s conclusory testimony depended on his subjective view that “variation . . . [is] inherent in the teletext”; he did not dispute the contrary disclosures in the textbook itself. (A17554, A24077, A24150-52, A24174-75, A24258.) Similarly, Mr. Eaton did not dispute that, in *Videotex Architecture*, a

reserved slot “is available to demand pages” (to satisfy claim 22’s requirement of reserving bandwidth (A17555-56, A24174-75)) or that multiple channels may be used for transmission (to satisfy claim 24’s requirement of such transmission (A17556, A24043-46, 24077; *see also* A17554-58 (failing to dispute other disclosures))).

JMOL of anticipation is warranted.

* * *

Videotex Architecture Anticipates the Remaining Asserted Claim Steps

Claim Requirement	Claim Step	Disclosures in <i>Videotex Architecture</i>
Timestamps	17(a) 39(h)	<ul style="list-style-type: none"> • Pages 62, 175 (A24059, 24174) • Figure 5.2 (A24059) • A17503, A17512-13
Decoding timestamps at subscriber stations	17(b) 39(i)	<ul style="list-style-type: none"> • Page 62 (A24059) • A17503-04, A17512-13
Informing subscribers when a specified portion will be received	17(c) 39(j)	<ul style="list-style-type: none"> • Page 62 (A24059) • A17504-05, A17512-13
Reserving bandwidth	22(a)	<ul style="list-style-type: none"> • Pages 175-76 (A24174-75) • Figure 10.5(b) (A24175) • A17505-06
Receiving subscriber requests, each specifying a portion of the information database	22(b) 44(i)	<ul style="list-style-type: none"> • Page 81 (A24077) • Figure 6.8 (A24077) • A17506-07
Scheduling transmission of requested portions	22(c)	<ul style="list-style-type: none"> • Pages 175-76 (A24174-75) • Figure 10.5(b) (A24175) • A17507
Transmission of data packets using multiple transmission channels	24(a)	<ul style="list-style-type: none"> • Pages 46-49, 81 (A24043-46, 24077) • Figure 6.8 (A24077) • A17507-08
Receiving data packets from selected ones of the multiple transmission channels	24(b)	<ul style="list-style-type: none"> • Pages 81, 149 (A24077, 24150) • Figures 6.8, 9.2 (A24077,

		24150) <ul style="list-style-type: none"> • A17508
Temporarily storing data in a buffer to compare and forward those packets that match filter data	26(a)	<ul style="list-style-type: none"> • Pages 149-52, 168 (A24150-53, A24167) • Figures 9.2, 9.4 (A24150, A24152) • A17509
Receiving all transmitted data packets at subscriber stations and forwarding only requested packets to a predefined destination	26(b)	<ul style="list-style-type: none"> • Pages 149-52 (A24150-53) • Figures 9.2, 9.4 (A24150, A24152) • A17509-10
Assigning and reserving transmission times for transmitting portions requested by subscribers	44(h)	<ul style="list-style-type: none"> • Pages 175-76 (A24174-75) • Figure 10.5(b) (A24175) • A17513
Transmitting the requested portions during the reserved transmission times	44(j)	<ul style="list-style-type: none"> • Pages 175-76 (A24174-75) • Figure 10.5(b) (A24175) • A17513-14

B. Even If *Videotex Architecture* Alone Did Not Anticipate The Claims-In-Suit, That Textbook In Combination With Other Prior Art Would Render Obvious The Claims-In-Suit

Even if the claims-in-suit were not disclosed in *Videotex Architecture* alone, they would still be invalid as obvious. An invention is obvious when any differences between the invention and prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a); *In re Kahn*, 441 F.3d 977, 985 (Fed. Cir. 2006) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966)). In determining the ultimate legal question of obviousness, relevant factual inquiries include (1) the scope and content of the pertinent prior art; (2) the differences between the claims-in-suit and the prior art; (3) the level of ordinary skill in the art; and (4) objective, secondary indications of nonobviousness. *Graham*, 383 U.S. at 17-18.

In denying JMOL, the court did not take issue with the facts establishing obviousness. For good reason: It is plain that the claims-in-suit are obvious over *Videotex Architecture* in combination with the five other references presented at trial. (A23309-32, A23333-23955, A23956-64, A23965-74, A23975-81.) The underlying *Graham* factors—none of which is materially disputed—bear this out.

First, the six references are undisputedly “prior art,” and there is no material dispute about their content.

Second, any differences between the claimed invention and the prior art are either nonexistent (thus establishing anticipation—the “ultimate in obviousness,” *Application of Grose*, 592 F.2d 1161, 1165 (C.C.P.A. 1979)) or minimal at best, so that combining elements from the references would have been obvious to one of ordinary skill. (A17494, 17501-02.) Indeed, *Videotex Architecture* expressly discusses other publications, including references admitted at trial, clearly teaching and suggesting the combination of the textbook with other, related pieces of prior art. (A24174, A24261-67, A17484, A17494, A17501-02.)

Third, as stated, the level of ordinary skill in the art was possessed and applied solely by DIRECTV’s invalidity expert. (A17554.)

Fourth, secondary considerations point only to obviousness: DIRECTV independently developed its system before the patent issued, and the patent was not copied by anyone, has had no commercial success, and has generated no novel results. *See Graham*, 383 U.S. at 17-18. Simply put, based on the six presented references, it would have been obvious, as a matter of law, to one of ordinary skill to combine elements from those references in the manner claimed, rendering erroneous the court’s denial of JMOL of obviousness.

Without disputing any of this evidence, the court instead took issue with the showing of a motivation to combine. (A17937.) Not only was that basis erroneous in fact (A17494, A17501-02, A17503-04) and under existing law, *see Kahn*, 441

F.3d at 985, but if, pursuant to the Supreme Court’s pending decision in *KSR International Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. argued Nov. 28, 2006), this Court’s teaching-suggestion-motivation requirement is in any way disturbed, then the court’s stated reason for denying JMOL would be erroneous as a matter of law, and the denial of JMOL could not be sustained for this reason as well.

IV. THE WILLFUL-INFRINGEMENT FINDING AND ENHANCED-DAMAGES AWARD CANNOT STAND

A. DIRECTV’s Conduct Was Commercially Reasonable, In Good Faith, And Nothing Close To Willful

To establish willful infringement, Finisar had to demonstrate, by clear-and-convincing evidence, that DIRECTV (i) had knowledge of the ‘505 patent, and (ii) upon acquiring such knowledge, failed to conduct itself as a reasonable company would. *See Hall v. Aqua Queen Mfg.*, 93 F.3d 1548, 1555 (Fed. Cir. 1996). The “primary consideration is whether the infringer, acting in good faith and upon due inquiry, had sound reason to believe that it had the right to act in the manner that was found to be infringing.” *SRI Int’l*, 127 F.3d at 1464-65.

Here, Finisar accused DIRECTV of infringing a patent that, based on numerous objective indicia, appeared to DIRECTV to disclose a system bearing no resemblance to what DIRECTV does. (A17380, A17396-17400.) Nonetheless, DIRECTV did not rely (as it could have) merely on its reasonable views, but sought and obtained a thorough, objective outside-counsel opinion, which

confirmed noninfringement. (A17377, A17380, A17384, A17398, A17400-01, A17407, A24567-24621.) *See Graco, Inc. v. Binks Mfg. Co.*, 60 F.3d 785, 793 (Fed. Cir. 1995) (“reasonabl[e] reli[ance]” on legal opinion that was “neither conclusory nor terse” but instead “detailed,” “well-supported and believable”). Finisar presented no testimony, expert or otherwise, that the 55-page report was not well founded, reasoned or supported, or that it was not competent, nor did the court so question the report.

Indeed, in ruling on DIRECTV’s JMOL motion, the court recognized DIRECTV’s affirmative steps in response to Finisar’s charge, and even acknowledged that DIRECTV made a “reasonable effort on infringement.” (A17937.) The court further recognized that DIRECTV succeeded on 8 of the 15 originally asserted claims, evidencing a close case and a factor that weighs in a defendant’s favor. (*Id.*) *See SRI Int’l*, 127 F.3d at 1465 (“closeness” a relevant factor). Significantly, the court further acknowledged that there was *no* evidence in this case of deliberate copying, harmful motivation, or attempts to conceal misconduct—the usual hallmarks of willfulness. (A17936-37.) *Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1225 (Fed. Cir. 2006); *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1342 (Fed. Cir. 2004) (en banc) (equating “willful” with “voluntary,” “deliberate,” and “intentional”).

In nonetheless denying JMOL, the court relied on factors that cannot, alone or together, support a willfulness finding.

First, the court faulted Mr. Crook for “never explain[ing] how he himself or his direct staff determined the infringement” question. (A17936; *accord* A17937.) That was hardly fair—the court improperly excluded the very testimony that would have provided those explanations (*see* Part IV.C), and which would have further confirmed the reasonableness of Mr. Crook’s actions and negated any adverse inference about the timing of Mr. Zimmerman’s report. Even so, Mr. Crook’s testimony that *was* before the jury could not support a willfulness finding: He testified that he made an initial noninfringement determination, leading him to conclude that licensing negotiations were not warranted, and to still seek an independent, outside opinion and a detailed report analyzing Finisar’s charge.

Second, the court faulted DIRECTV for an alleged lack of evidence that “management” considered and evaluated DIRECTV’s possible defenses against infringement. (A17937.) However, there is no dispute that Mr. Crook *is* “management,” and specifically the officer responsible for intellectual-property matters, including deciding whether to enter licensing negotiations or initiate changes in the DIRECTV system. (A17396-98, A17407-08.) His prompt initial investigation and commercially-reasonable decision to solicit a detailed evaluation is thus directly attributable to DIRECTV. *See Harris*, 417 F.3d at 1259; *Askanase*

v. Fatjo, 130 F.3d 657, 666 (5th Cir. 1997); *Continental Oil Co. v. Bonanza Corp.*, 706 F.2d 1365, 1376 (5th Cir. 1983). To the extent the court was faulting Mr. Crook for not discussing his procedure or actions with *other* officers or DIRECTV's board of directors, no such requirement exists, nor would one make sense. The relevant question is whether the responsible person(s) were advised and acted on the advice. As stated, that clearly happened here.

Third, the court faulted DIRECTV for not *also* designing around the patent (A17937), seeming to believe that one must both have a reasonable belief of noninfringement yet also modify its accused systems prophylactically. This is not the law. *See Gustafson, Inc. v. Intersys. Indus. Prods.*, 897 F.2d 508, 511 (Fed. Cir. 1990) (An accused infringer “[e]xercising due care” is entitled to “continue to manufacture . . . without risk of being found on that basis alone a willful infringer.”). Nor would the practical effect—allowing non-infringed claims to disrupt commerce—be good law or policy.

Fourth, although the court suggested that the 431-day period it took Mr. Zimmerman to write the evaluation was somehow troublesome (A17936), the relevant consideration is when DIRECTV *sought* the opinion, and whether DIRECTV had reasonable noninfringement views before receiving the report, because the governing inquiry is the state of mind and reasonableness of the accused infringer. (Indeed, no written opinion is required.) Mr. Crook's initial

assessment, his decision to seek an outside opinion within two months of Finisar's first vague charge, and Mr. Zimmerman's regular updates to DIRECTV during his evaluation period—providing his unswerving view that the claims were not infringed—all demonstrate DIRECTV's noninfringement state of mind and that DIRECTV acted well within the range of reasonableness. *SRI Int'l*, 127 F.3d at 1467; *Graco*, 60 F.3d at 793-94; *see also LNP Eng'g Plastics v. Miller Waste Mills*, 275 F.3d 1347, 1357 (Fed. Cir. 2001) (opinion not sought until two years after receipt of infringement notice); *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1571 (Fed. Cir. 1996) (sought eight months later). In any event, even if the 431-day period is assessed, that period must be measured by the scope of Mr. Zimmerman's assignment—comparing 48 multiple-step claims to two complex program-guide systems—and the detail and thoroughness appropriately provided in his report. Thus, even setting aside that organizational changes at Mr. Zimmerman's law firm delayed the delivery date of his final report (A17384), the total evaluation period was appropriate and commensurate with the task.

Finally, the court faulted DIRECTV for obtaining an opinion that addressed only infringement, and not *also* invalidity. (A17936-37.) This Court has emphatically rejected that as “specious”: “There is no requirement that an opinion *must* address validity to negate a finding of willful infringement.” *Graco*, 60 F.3d at 793. Moreover, contrary to the court's suggestion (A17937), the *Markman*

ruling—which DIRECTV believes was clearly in error (*see* Part I)—did not nullify the reasonableness of the construction on which DIRECTV and its outside counsel actually relied before suit, nor the thorough, credible opinion on which that construction was based. *See Johns Hopkins Univ. v. CellPro, Inc.*, 152 F.3d 1342, 1364 (Fed. Cir. 1998).

Each of the stated reasons for upholding the willfulness finding and awarding enhanced damages was contrary to law. The willfulness verdict and subsequent enhancement cannot be sustained.

B. The \$25 Million Punitive Enhancement Is Unwarranted And Unconstitutional Because There Was No Evidence Of Reprehensible Conduct By DIRECTV

Enhanced damages under 35 U.S.C. § 284 are “punitive, not compensatory.” *Sensonics*, 81 F.3d at 1574; *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827-28 (Fed. Cir. 1992) (noting that this Court’s willfulness jurisprudence is “in line with punitive damage considerations in other tort contexts”), *abrogated in part on other grounds by Markman v. Westview Instruments*, 52 F.3d 967 (Fed. Cir. 1995) (en banc). Due process thus requires that such an award be made only where there is conduct “so reprehensible as to warrant the imposition of further sanctions to achieve punishment or deterrence.” *State Farm Mut. Auto. Ins. Co. v. Campbell*, 538 U.S. 408, 419 (2003); *see also BMW of N. Am. v. Gore*, 517 U.S. 559, 575 (1996) (“Perhaps the most important indicium” of punitive damages is “the degree

of reprehensibility of the defendant's conduct."); *Knorr-Bremse*, 383 F.3d at 1348-49 (Dyk, J., concurring in part and dissenting in part). In the patent-infringement context, reprehensible conduct might include "deliberate copying, concealing infringing activity, infringement where the infringer knows that it is infringing or where it knows it has only frivolous defenses, infringement designed to injure a competitor, etc." *Knorr-Bremse*, 383 F.3d at 1348-49 (Dyk, J., concurring in part and dissenting in part).

In denying DIRECTV's motion to vacate the enhanced-damages award, the court did not even mention, much less discuss, DIRECTV's due-process objection. Even if it had, the award could not stand: The \$25 million penalty was supported by *no* evidence of reprehensibility. *See Gore*, 517 U.S. at 579-80 (rejecting punitive award where the record disclosed "no deliberate false statements, acts of affirmative misconduct, or concealment of evidence of improper motive").

Indeed, the court all but declared that there was no reprehensibility when it found that DIRECTV's conduct did not involve "direct copying and deliberately stealing of ideas or pirating of employees or something like that kind of willfulness" and even recognized "reasonable effort" in investigating the infringement charge. (A17936-38.) At most, the court found that DIRECTV failed to exercise due care regarding its allegedly "unexplained delay" in its evaluation (A17938)—a finding that not only improperly permitted the willfulness

verdict to stand (*see* Part IV.A) but also improperly enhanced damages without finding reprehensible conduct.

The court's only other stated reason for enhancing damages was that the extra \$25 million would "fully compensat[e] Finisar." (A17938.) That ran afoul of this Court's pronouncements that "enhanced damages are punitive, *not* compensatory." *Sensonic*, 81 F.3d at 1574. To justify *any* enhancement, let alone a \$25 million penalty, due process required a reprehensibility finding, not a desire to supplement Finisar's compensation.

Because there was no reprehensible conduct, the \$25 million enhancement was unconstitutional and should be vacated.

C. At A Minimum, DIRECTV Is Entitled To A New Trial To Present Improperly Excluded Evidence Of Mr. Crook's State Of Mind Relevant To Noninfringement

While Finisar's evidence failed to establish willful infringement by any standard (much less clearly and convincingly), DIRECTV's evidence concerning Mr. Crook's (and by extension, DIRECTV's) state of mind relevant to noninfringement would have fully confirmed the failure of Finisar's case. The court precluded DIRECTV from presenting that testimony, on the ground that DIRECTV should have disclosed Mr. Crook's views pursuant to a local rule governing "produc[tion]" and "copying" of "opinion(s) and any other documents" relevant to a willfulness charge.

Had he been permitted, Mr. Crook would have testified that, [

]

(A11625-27, A11742.1-42.5.)

In granting Finisar's motion to exclude under local Patent Rule 3-8 (A115, A18058) (a ruling on which the court wholly relied in later denying DIRECTV's new-trial motion (A33)), the court erred: DIRECTV plainly satisfied Rule 3-8. That Rule provides that each party relying "on an opinion of counsel as part of a defense to a claim of willful infringement" shall "[p]roduce or make available for inspection and copying the opinion(s) and any other documents relating to the opinion(s) as to which that party agrees the attorney-client or work product protection has been waived." E.D. Tex. Patent R. 3-8(a), (b). Here, the term

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“opinion(s)” plainly refers to *written* attorney work-product, not personally-held, unwritten views: Only a tangible thing can be “produce[d]” or “ma[d]e available for inspection and copying,” and, in any event, the Rule is directed to “opinion(s) and any *other* documents.” *Id.*; accord *In re Indep. Serv. Orgs. Antitrust Litig.*, 85 F. Supp. 2d 1130, 1141 (D. Kan. 2000) (holding that Federal Rule of Evidence, 803(6), addressing “memorand[a], report[s], record[s] or data compilation[s],” “applies only to written or tangible documents, . . . not to oral statements”); *Quiles v. Sikorsky Aircraft*, 84 F. Supp. 2d 154, 161-62 (D. Mass. 1999) (same for Federal Rule of Evidence 803(8)); Fed. R. Civ. P. 34(a) (for “[p]roduction” purposes, defining “documents” to include “writings, drawings, graphs, charts, photographs, sound recordings, [and] images”). In producing Mr. Zimmerman’s written report and all other documents relevant to the willfulness charge—[

]—DIRECTV fully complied with the Rule.

In contrast to those written documents, Mr. Crook’s non-written personal beliefs and opinions, including those based on Mr. Zimmerman’s interim oral reports, simply do not fall within the language of Rule 3-8. Even the court acknowledged that nothing in the Rule requires Finisar’s preferred reading that “in-house counsel or a corporate representative . . . who happens to be an attorney has to reduce his opinions to writing.” (A17888.) The oral or written nature of the

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views thus directly affects whether Rule 3-8 applies. Having expanded Rule 3-8 to require all oral noninfringement views to be reduced to writing—and with no notice to DIRECTV of that interpretation—the court’s interpretation is ineffective, and owed no deference. *Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344, 1358 (Fed. Cir. 2006) (noting that, although a district court has broad discretion in interpreting local rules, those rules must “provide clear notice”); *John v. Louisiana*, 757 F.2d 698, 707 (5th Cir. 1985) (similar).

Contrary to the court’s apparent view that, without applying Rule 3-8 to personally-held opinions, parties could unfairly “come up with new opinions” until trial (A17889), the Rule’s inapplicability does not leave a plaintiff without devices to discover and hold a witness to his personally-held opinions. Views such as Mr. Crook’s are subject to the full panoply of normal discovery procedures, including disclosures, interrogatories, depositions, and requests for admission. *See Fed. R. Civ. P. 26-37.*

Here, Finisar declined, perhaps strategically, to use those procedures. For instance, due to DIRECTV’s compliance with the disclosure requirements of Federal Rule of Civil Procedure 26, [

] (A11639, A11680.) Mr. Crook was undoubtedly such a recipient—in the position, as the court observed, of many corporate

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representatives, “includ[ing] attorneys,” who “nowadays . . . take a look at [the] written advice, make their decision on what they are going to do, and then explain it” at trial. (A17887.) Similarly, due to DIRECTV’s response to Finisar’s Rule 30(b)(6) deposition notice, [

] ⁹ (A11675,

A11688.) And, due to DIRECTV’s Rule 3-8 production, Finisar was aware that, [

] (A11742.1-42.5.)

When it deposed Mr. Crook, however, Finisar asked no questions regarding his personal noninfringement views. Finisar adhered to that approach even after Mr. Crook made clear that DIRECTV intended to rely on noninfringement views not governed by Rule 3-8’s production requirements: [

] (A11695.) Yet Finisar never inquired further. Such

⁹ Having disclosed Mr. Crook as a witness and waived any otherwise-applicable privilege, DIRECTV cannot be charged with having chosen a “tactical” approach to its disclosures to avoid “waiv[ing] the attorney-client privilege.” (A17936.)

gamesmanship cannot and does not justify exclusion of Mr. Crook's testimony, much less pursuant to an inapplicable local rule.

The court's ruling greatly prejudiced DIRECTV. Mr. Crook's testimony would have bolstered the good-faith evidence before the jury and precluded any improper inference from the timing of outside counsel's written opinion. Indeed, in sustaining the willfulness verdict, the court perversely demonstrated the relevance of Mr. Crook's testimony. The court noted that Mr. Crook, who "seemed well qualified in the field of patent law, never explained how he himself or his direct staff determined the [non]infringement," and that there was only "an indication" that Mr. Crook thought DIRECTV was not infringing. (A17936.) It was improper for the court to whipsaw DIRECTV like this—the reason Mr. Crook "never explained" these things was because his explanations and details had been precluded (on an unsustainable ground, no less). A new trial where this evidence can be presented is appropriate.

CONCLUSION

The judgment of the district court should be reversed.

Dated: March 28, 2007

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gregory A. Castanias", written over a horizontal line.

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