

**Before the
Federal Communications Commission
Washington, D.C. 20054**

In the Matter of)	
)	
Implementation of Section 304 of the Telecommunications Act of 1996)	CS Docket No. 97-80
)	
Commercial Availability of Navigation Devices)	
)	
Compatibility Between Cable Systems and Consumer Electronics Equipment)	PP Docket No. 00-67

**PETITION FOR RECONSIDERATION OF GENESIS MICROCHIP,
INC.**

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Summary

Genesis Microchip, Inc. (“Genesis”) is a leading supplier of display image processors used in LCD monitor displays, flat panel displays, CRT digital displays, DVD players, and set-top boxes. Genesis seeks reconsideration of that portion of the Second Report and Order in this proceeding which prohibits unidirectional digital cable television devices from being labeled or marketed as “digital cable ready” unless they employ a DVI or HDMI digital display interface.

The DVI and HDMI standards are private accords developed by closed industry groups. As a result, Genesis and other vendors are required to license these standards and the underlying patents from the private groups that control the standards. This puts Genesis and others at a potential competitive disadvantage in the market. It also raises the risk that such specifications – which are developed and maintained by a small private group of patentees – will be manipulated for anticompetitive gain. Indeed, Genesis has already been sued for patent infringement by one of the members of the DVI working group after Genesis began developing DVI-compliant products.

The Commission’s adoption of the DVI and HDMI standards violated Section 629 of the Communications Act, which requires the Commission to consult with “appropriate industry standards setting organizations” to adopt regulations to achieve the competitive availability of cable navigation devices. The law is clear that “appropriate standards setting organizations” include groups such as the IEEE and ANSI, which develop standards in open proceedings pursuant to rigorous policies of patent disclosure. Here, however, in its haste to facilitate the transition to digital television, the Commission blindly accepted private standards from two trade groups that did not have patent policies or license review procedures in place to protect industry competition.

In addition to violating the statutory mandate of Section 629, the Commission’s decision to accept technical standards from private organizations whose primary goal is to promote their members’ patented technology, is squarely at odds with past Commission precedent. Indeed, over the past 50 years, the Commission has *never* adopted a technical standard that was not the product of an accredited standards setting organization, the work of a federal advisory committee, or the result of an open proceeding in which the proposed standards were tested by the Commission staff and subjected to public scrutiny.

The Commission’s actions also violated the notice and comment provisions of the Administrative Procedures Act (“APA”). Although the Commission’s rules require the implementation of DVI and HDMI technology, never during the course of this proceeding did the Commission give notice of the specifications themselves. Moreover, the Commission never took appropriate action to incorporate the specifications into its rules by reference. As a result, the Commission cannot mandate the use of these specifications consistent with the APA.

Since the Commission ignored the mandate of Section 629, strayed from past precedent, and violated the requirements of the APA, it must now reconsider the requirement that digital cable ready products employ the DVI or HDMI interfaces. In this Petition for Reconsideration, Genesis seeks revision of Section 15.123 of the Commission's rules to permit the use of any digital display interface standard in a unidirectional digital cable television device for the purpose of marketing such device as a digital cable ready, provided the standard has been developed pursuant to a standards-making process that is open to the public and includes a patent licensing policy comparable to the ANSI patent policy. Genesis also seeks revision of Section 76.640 of the Commission's rules to remove the phrase "DVI or HDMI" as one of the output requirements for high definition set top boxes. In the alternative, Genesis seeks all of the following:

(1) Modification of the Second Report and Order in this proceeding to conditionally approve DVI and HDMI as acceptable display standards for unidirectional digital cable television products, provided a full public disclosure is made and approved by the Commission with respect to (a) all patents and pending patents which are required to implement these standards, (b) all "necessary claims" in such patents required to implement these standards, and (c) all licensing terms and conditions associated with such patents; and

(2) Modification of the Second Report and Order in this proceeding to conditionally approve DVI and HDMI as acceptable display standards for unidirectional digital cable television products, provided the maintenance and further development of these standards are turned over to an ANSI-accredited standards development organization; and

(3) Revision of Sections 15.123 and 76.640 of the Commission's rules to include the specification revision numbers for the DVI and HDMI standards with the understanding that any changes or amendments to such specifications will be required to undergo a notice and comment proceeding before adoption by the Commission.

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PETITION FOR RECONSIDERATION

Genesis Microchip Inc. (“Genesis”), by its counsel, pursuant to Section 1.429 of the Commission’s rules, hereby submits this Petition for Reconsideration of the Second Report and Order in the above-captioned proceeding.¹ Genesis is a leading supplier of display image processors. Its customers include brand name manufacturers of LCD monitor displays, flat panel digital displays, CRT digital displays, DVD players and set-top boxes. Genesis will be directly affected by the outcome of this proceeding.

Genesis asks the Commission to reconsider only one portion of the Plug & Play Order, to wit, the requirement that unidirectional digital cable television devices may not be labeled or marketed as “digital cable ready” unless they employ a DVI or HDMI digital display interface.² As the record makes clear, the Commission adopted this requirement based solely on a private agreement (the “Memorandum of Understanding” or “MOU”) among certain members of the cable television and consumer electronics industries; moreover, the standards themselves are the private accords of closed industry groups

¹ Second Report and Order and Second Further Notice of Proposed Rulemaking in CS Docket No. 97-80 and PP Docket No. 00-67, *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices and Compatibility Between Cable Systems and Consumer Electronics Equipment*, Adopted September 10, 2003 (“Plug & Play Order”).

² 47 C.F.R. § 15.123(b)(6) (2003) (“Section 15.123”). In addition, 47 C.F.R. § 76.640(b)(4) (2003) (“Section 76.640”), must be reconsidered as it requires implementation of the DVI or HDMI standard by cable operators after July 1, 2006.

whose sole purpose is to maintain anticompetitive control of the industry. In its haste to codify the MOU, the Commission conducted no independent analysis of the DVI and HDMI standards, failed to ensure that the standards were subject to the formality of an “appropriate” standards setting organization as required by law, made no inquiry into the patent policies that have been or are being used to license these standards, sought no public consideration of alternative display standards, neglected to place the DVI and HDMI technical specifications on the public record,³ and failed even to properly incorporate them by reference in the rules. By acting in this fashion, the Commission failed to comply with Section 629 of the Communications Act,⁴ failed to give adequate notice and opportunity for comment in violation of the Federal Administrative Procedures Act, and failed to act in the public interest.

Accordingly, Genesis seeks the following specific relief upon reconsideration of the Plug & Play Order:

(1) Revision of Section 15.123 to permit the use of any digital display interface standard in a unidirectional digital cable television device for the purpose of marketing such device as “digital cable ready,” provided the standard has been developed pursuant to a standards-making process that is open to the public and includes a patent licensing policy comparable to the American National Standards Institute (“ANSI”) patent policy; and the revision of Section 76.640 to remove the phrase “DVI or HDMI” as one of the output requirements for high definition set top boxes;

In the alternative, Genesis seeks all of the following:

(1) Modification of the Plug & Play Order to conditionally approve DVI and HDMI as acceptable display standards for unidirectional digital cable television products, provided a full public disclosure is made and approved by the Commission with respect to (i) all patents and pending patents which are required to implement these standards, (ii) all “necessary claims” in such patents required to implement these standards, and (iii) all licensing terms and conditions⁵ associated with such patents;

³ In the case of HDMI, the Commission never saw, much less analyzed, this specification which costs \$15,000 to obtain.

⁴ 47 U.S.C. § 549 (“Section 629”).

⁵ The Commission has a history of requiring the disclosure of licensing terms and conditions when patents are involved in standards development. See *Advanced Television Systems and Their Impact Upon the*

(2) Modification of the Plug & Play Order to conditionally approve DVI and HDMI as acceptable display standards for unidirectional digital cable television products, provided the maintenance and further development of these standards are turned over to an ANSI-accredited standards development organization; and

(3) Revision of Sections 15.123 and 76.640 to identify the Specification revision numbers for the DVI and HDMI standards being adopted with the understanding that any changes or amendments to such Specifications will be required to undergo a notice and comment proceeding before adoption by the Commission.⁶

Background

Genesis is in the business of making, among other things, integrated circuits that receive and process digital video and graphic images. These circuits are typically located inside a display device and process incoming images for viewing. Genesis products target several major markets including flat-panel computer monitors, flat-panel displays, progressive scan cathode ray tubes and other high-volume display applications. Genesis products use sophisticated digital signal processing techniques to enhance picture quality and provide display features not generally available from most other manufacturers. For Genesis to successfully compete in the digital display markets, it must incorporate current industry standards, such as DVI and, in the future, HDMI, into its product lines. Because DVI and HDMI are privately developed standards, however, it is necessary for Genesis to license these specifications from the private working groups which control these standards. Significantly, certain members of these working groups actively assert patent infringement claims against products implementing these standards, thus the licenses obtained by Genesis must also include the authorization to use such patents.

A potential problem that arises under such licensing is that the DVI and HDMI patent holders compete directly against Genesis and other vendors of integrated receiver

Existing Television Broadcast Service, 11 FCC Rcd 17771, 17794 (1996) (“ATV”); see also Report and Order and Further Notice of Proposed Rulemaking in MB Docket 02-230, *Digital Broadcast Content Protection*, Adopted November 4, 2003 (“Broadcast Flag”).

⁶ Inexplicably, the Commission’s Play & Plug Order makes no reference to the DVI or HDMI specification number while the new Broadcast Flag rules specifically reference “DVI Rev 1.0 Specification.”

components. Vendors, who must license their competitors' patents to implement the specifications, are at a potential competitive disadvantage in the market. Further, it raises the risk that such specifications, which are developed and maintained by a small, private group of patentees, will be manipulated for anti-competitive gain. For example, competition in the display receiver markets is harmed by a failure of the working groups to disclose in a timely manner (1) patents and pending patents which claim the specifications, (2) "necessary claims" in such patents that are required to implement the specification, and (3) the licensing terms and conditions for such patents. Such threats to competition are particularly troublesome when the industry standard is a *de facto* specification. When the specification is a *de jure* requirement approved by a government agency, the threats to competition are much greater.

Historically, standards organizations have protected against competitive abuses from patent holders by conducting all of their activities on an "open industry" basis and by enforcing a patent policy grounded on full disclosure of both issued and pending patents. In Reply comments filed in this proceeding, Genesis raised these concerns with the Commission, pointing out that neither the DVI nor HDMI working groups are open standards organizations and neither has a patent policy or license review procedure to protect industry competition.⁷ As a result, when Genesis began developing DVI-compliant products pursuant to a license ("DVI Adopters Agreement")⁸ issued by the DVI Digital Display Working Group ("DDWG"), it was "blind-sided" by an infringement suit brought by Silicon Image Inc. ("SII"), a key member of the DDWG and holder of certain DVI-based patents. SII waited until Genesis invested millions in developing DVI-compliant products before presenting its claims for patent infringement. Genesis believed it was fully licensed to make DVI-compliant products when it signed the DVI Adopter's Agreement only to find that it had walked into a litigation trap that, to date, has consumed millions in costs and fees. Genesis believes the entire industry should be anxious to avoid a repeat of SII's "standardize and sue" scheme -- a patent-based variation of the classic "bait and switch" scheme.

⁷ Reply Comments of Genesis (April 28, 2003) ("Reply Comments").

⁸ A copy of the DVI Adopters Agreement is contained in Attachment 1.

In the recent litigation, SII took the position that the DVI license (which the Commission described in the Plug & Play Order as being “freely available”) did not cover television and related consumer electronics products that receive DTV transmissions. SII disputed whether certain patent claims which neither SII nor the DDWG ever disclosed to DVI adopters were, in fact, needed to implement the DVI specification. With no patent disclosures on the record and no impartial standards group willing to intervene or mediate SII’s unreasonable claims, Genesis has, for the past two years, been at the mercy of the courts defending the very allegations which an open standards making process is designed to avoid.⁹

I. Reconsideration is Appropriate When Predicate Facts are in Error

Section 1.429 calls for the reconsideration of rules which are adopted based on factual error.¹⁰ In this instance, the Commission was either misinformed or unaware of certain material facts concerning the DVI and HDMI standards, which, had they been known, would not have resulted in their adoption.¹¹

In its Reply Comments, Genesis alerted the Commission to the dangers of a standards program that does not include the advance disclosure of patent information.¹² Genesis noted that by proposing to require standards which have not been developed under the safeguards of an accredited or open standards-setting body, a federal advisory committee, or at least the full scrutiny of notice and comment proceeding the Commission would be breaking from 40 years of past practice and would subject the public to unknown demands of private patent holders. The Commission gave these arguments short shrift, however, stating that the DVI and HDMI specifications are “widely available,” and that the adopter agreements for the technologies were “freely offered on non-discriminatory

⁹ The Commission’s belief that its 40 year old patent policy, coupled with an untested complaint process for resolving patent licensing abuses, is a substitute for open standards, *a priori* patent disclosure and license review represents the sad philosophy of closing the barn door after the horse has not only left, but trampled those in its path.

¹⁰ 47 C.F.R. § 1.429 (“Section 1.429”).

¹¹ Neither Genesis nor anyone else was in a position to disclose these facts previously to the Commission. Nothing in the Further Notice suggested that the Commission was considering the adoption of rules that would require manufacturers to execute anticompetitive agreements developed by private standards groups.

¹² Genesis Reply Comments.

terms.” Both of these statements were, and are if not factually incorrect, misleading and unresponsive to Genesis’ concerns.

A. The Commission has misconstrued the availability of DVI and HDMI technology.

The wide availability of a standard in the market may be a reason to permit industries to voluntarily use it, but has little bearing on whether it should be required by Commission rules. Nor is the presence of such technology an indication of how it became available and whether it will, in the future, be available on a reasonable and non-discriminatory basis. Moreover, market acceptance is hardly a justification for allowing a private standard to be free of the due process protection of an appropriate standards development organization. It is a fact that these technologies are available only under the terms and conditions that SII and its small group of partner companies arbitrarily dictate. Thus, the Commission’s assertion that the DVI (and HDMI) technology is “widely available” misses the point.¹³

There is no record evidence in this proceeding that the DVI specification is available for Plug & Play technologies based on a licensing agreement, much less a non-discriminatory licensing agreement. As Genesis explains in greater detail below, SII (and perhaps others of the DDWG) believes that the DVI Adopter’s Agreement extends only to computer product displays, not to television and consumer electronic products (hereafter collectively referred to as “CE”).¹⁴ Additionally, the Commission’s assertion that the HDMI specification is widely available is likewise in error. As explained below, the HDMI Adopter’s Agreement is carefully worded to permit companies like SII to extract arbitrary royalties from the industry after the HDMI standard is widely adopted.¹⁵ Moreover, the HDMI Adopter’s Agreement punishes any company that challenges the

¹³ While there does indeed seem to be a large number of devices with DVI connectors available in the market, the same is certainly not true in the case of HDMI. To date, or at least when the Commission’s report and order was adopted, Genesis was not aware of any products on the market with HDMI interfaces.

¹⁴ SII has proven its intention to arbitrarily restrict the availability of DVI through litigation.

¹⁵ A copy of the DVI Adopter’s Agreement is contained in Attachment 2. Note that the HDMI Adopter’s Agreement expressly prohibits manufacturers from being licensed to follow the examples provided in the specification. HDMI Adopter’s Agreement at 1.16 state “Necessary Claims shall not include, and no license shall apply to : (a) informative implementation examples provided in the Specification; ...”

patent rights of the HDMI founders, a provision that is facially anticompetitive and contrary to established law.¹⁶

B. There is no Evidence that the Adopters Agreements are “offered on non-discriminatory terms.”

It is not clear what formed the basis of the Commission’s assertion that the adopter agreements for the DVI and HDMI technologies are “freely offered” on non-discriminatory terms. Genesis never argued that one could not obtain the agreements, but rather that the Commission should require disclosure of such agreements on the record so that it might glean something about the reasonableness of the patent policies and the terms and conditions under which licenses are offered.

Genesis is not aware that the license for either specification has been placed in the record of this proceeding or that they have been analyzed by the Commission’s staff. Were that the case, the staff would have learned that the DVI Adopter’s Agreement provides no patent disclosure. Moreover, SII openly asserts in its litigation with Genesis that the DVI Adopter’s Agreement discriminates against all those wishing to license the DVI interface for use in television products. Under the Agreement, licensees are granted royalty-free permission to “make, have made, use . . . products (hardware, software or combinations thereof) that implement and are Fully Compliant with the Digital Display Interfaces to provide an interface between a computer and a digital display.”¹⁷ According to SII, the term “computer” means only a PC and not other microprocessor-driven devices such as video game consoles; thus, the DVI Adopters Agreement applies only to PC’s and not to CE products. On its face, therefore, the DVI Adopters Agreement discriminates unfairly between computer and CE use.¹⁸

Particularly troubling to the industry is the fact that a display that is sold to consumers for use with a PC is identical in all respects to a display that is used as a television. SII’s

¹⁶ The perceived “wide availability” of HDMI is also belied by the fact that it costs \$15000 for anyone just to view the specification and an additional \$15000 annually thereafter.

¹⁷ DCI Adopter’s Agreement (emphasis added).

¹⁸ Research indicates that many consumer television products contain the DVI interface. Presumably the manufacturers bought the technology directly from Silicon Image since the DVI Adopters Agreement does not provide for a license for use in television products.

position is that licensees must somehow divine how their products will ultimately be used by consumers or face litigation. Previously, SII made a number of public statements inviting the industry to design DVI into CE systems pursuant to the DVI Adopters Agreement. If SII returns to that position now, it would be a welcome step toward an open standard, but it must do so publicly, on the record, and irrevocably.¹⁹

Similarly, had the Commission demanded that the HDMI Adopter's Agreement been placed on the record as Genesis urged, the staff would have learned, for instance, that the patents and claims subject to the license (the so-called "necessary claims,") are not spelled out anywhere in the Agreement. Indeed, the HDMI Adopters Agreement places the burden of proof as to what patent claims may be necessary to implement the specification, and thus licensed, squarely on the shoulders of the licensee. This invites a high stakes guessing game and presents an invitation to burdensome and anti-competitive patent infringement litigation. The careful wording of the HDMI Adopters Agreement permits HDMI founders to sue manufacturers for anything that is not strictly required by the standard. Because an interface like HDMI will require a number of essential technologies, HDMI founders are in a position to perpetrate the same "standardize and sue" scheme that SII has brought to the DVI case.²⁰

Further, should an HDMI licensee have the temerity to challenge the validity or enforceability of any "necessary claim" in court or in any other official action, the claim is automatically excluded from the licensing agreement.²¹ Under this provision, should a licensee come to the Commission seeking resolution of a patent dispute it will automatically lose its license to those claims. Not only is such a licensing provision against public policy and unenforceable as held the Supreme Court more than 30 years

¹⁹ If the DVI Adopters Agreement has been changed or expanded to permit the DVI license to extend to television products, such an Agreement has not been made part of the record of this proceeding.

²⁰ Moreover, the HDMI Adopters Agreement requires adopters to submit products for "certification" which is a euphemism for permitting the HDMI founders to evaluate infringement claims before competitive products are introduced into the market.

²¹ HDMI Adopters Agreement, *supra*.

²² See *Lear v. Adkins*, 395 U.S. 653 (1969). The court held that such a provision violates the strong federal policy favoring free competition for ideas that do not merit patent protection.

ago,²² but it runs counter to the Commission's enforcement mechanism to "consider any complaint that these technologies are not being licensed on reasonable and non-discriminating terms, or are unavailable due to outstanding patent claims."²³ There can be little doubt that a license which includes such unenforceable and anti-competitive language cannot, as a matter of law, be considered reasonable and non-discriminatory.

Finally, the HDMI Adopters Agreement provides that if an adopter has a patent of its own that it believes forms a necessary claim to the HDMI standard, it may not assert such claim against the HDMI Founders or other adopters.²⁴ By signing the HDMI agreement, a licensee forfeits the right to enforce its own patents against the HDMI Founders or anyone else who has signed the HDMI Adopters Agreement.²⁵ In this way, the HDMI Founders (who are the sole specifications developers) maintain control of all patent licensing for HDMI products.

The terms of these agreements are, if not illegal and unenforceable, certainly unreasonable and hardly the sorts of provisions that an accredited standards-organization would knowingly sanction. Since the Commission has made itself a surrogate for such an organization, the task of reaching judgments on whether the specification licenses are fair and reasonable have become its responsibility. The best time to address these issues to ensure that the DVI and HDMI standards will be licensed fairly and non-discriminatorily is during the rulemaking process, not in some contentious complaint process in the future. It is the Commission's responsibility, therefore, to address these issues now.²⁶

²³ Plug & Play Order at Para 25.

²⁴ HDMI Agreement, *supra*.

²⁵ This penalty continues to run for three years after an Adopter withdraws from the licensing agreement.

²⁶ Within the last six months the Federal Trade Commission has begun an investigation into the possibly anticompetitive nature of the DVI licensing process. This investigation is part of a larger effort by the FTC to investigate anticompetitive patent licensing in the technology sector, e.g., "the Rambus case". Under these circumstances, it seems even more important that the Commission perform its own analysis of the DVI and HDMI Adopters Agreements.

II. Adoption of DVI and HDMI Standards Violates Section 629 of the Communications Act.

The Commission violated its statutory mandate by blindly adopting the work of private organizations for the development of unidirectional digital cable standards. Under Section 629 of the Communications Act, the Commission is required to consult with “appropriate industry standards setting organizations” to adopt regulations to achieve the competitive availability of cable navigation devices.²⁷ If the Commission believes it has satisfied this requirement by accepting the privately-adopted DVI and HDMI standards merely because they may have been endorsed by two trade associations, the National Cable & Telecommunications Association (NCTA) and the Consumer Electronics Association (CEA), it is mistaken. When Congress specified the use of appropriate standard-setting organizations it did not intend that the Commission rubber-stamp the outcome of closed-door negotiations between exclusive or private organizations. And Congress left no doubt as to its intent. In the congressional history of Section 629, examples of “appropriate” organizations are specifically noted as the Institute of Electrical and Electronics Engineers (“IEEE”), the Digital Audio Video Council (“DAVIC”), the Moving Picture Experts Group (“MPEG”) and the American National Standards Institute (“ANSI”) – all organizations that develop standards in open proceedings pursuant to rigorous policies of patent disclosure, or develop open standards which are deployed without royalty payment.²⁸

In its first Report and Order in this proceeding, the Commission evidenced its understanding of the mandate of Section 629 by requiring that any standards adopted be based on the work of nationally accredited standards setting organizations.²⁹ In its discussion of a decoder interface standard (EIA-105) being endorsed and promoted by OpenCable and CableLabs, the Commission stated:

²⁷ Section 629, *supra* note 4.

²⁸ H.R. CONF. REP. 104-458, at 181 (1986). Some of these organizations are “accredited,” while others are accrediting bodies. Clearly the term “appropriate” means both. Just as clearly, it does not mean private groups.

²⁹ *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 13 FCC Rcd 14775 (1998) (“Report and Order”).

What is important is for the device supplied by the service provider to be designed to connect to and function with other navigation devices through the use of a commonly used interface or through an interface that conforms to appropriate technical standards promulgated by a national standards organization.³⁰

The Commission went on to explain that:

Although neither OpenCable nor CableLabs are accredited standards organizations, they are attempting to use existing standards to the extent possible and to submit standards for consideration by official standards bodies. A number of the core standards involved, including such critical parts as the digital video compression and transmission standards for cable television, have been approved by accredited standards organizations already.³¹

Thus, the Commission was aware of its responsibilities under Section 629 to base its decisions on the product of accredited standards organizations as the Congressional history indicated.³² Even though, in the end, the Commission elected not to adopt a specific decoder interface standard, it reiterated the bedrock principle that any navigation device standard arrived at by the industry be one which is “promulgated by a national standards organization.”

On April 14, 2003, in a separate proceeding in this docket, the Commission dealt again with the issue of industry standards when it extended the deadline on the prohibition on integrated devices.³³ In its order, the Commission noted as one reason for the extension that the cable and consumer electronic industries “were in the midst of negotiations on specifications for bi-directional digital cable receivers and products which would permit the receipt of advanced cable television services by direct connection in the near term.”³⁴ Significantly, the Commission recounted its responsibility under Section 629:

³⁰ *Id.* at 14804 (emphasis added).

³¹ *Id.* at 14806 (emphasis added).

³² The Commission was so sensitive to the Congressional mandate that it consult with industry standard-setting groups, that it took pains to explain in footnote 111, “[w]e have consulted with what we consider the appropriate industry standard setting organizations given the stage of development of the standards.” Although the Commission was referring to CableLabs and the Consumer Electronics Manufacturers Association (“CEMA”), it is important to note that the standards under discussion were those promulgated by other, accredited, standards organizations.

³³ *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, 18 FCC Rcd 7924 (2003).

³⁴ *Id.* at 7925-26.

“Although the ongoing negotiations between the consumer electronics and cable industries are not being conducted under the auspices of a formal standards setting organization, any specifications resulting from such negotiations would be subject to subsequent review and adoption by an appropriate organization.”³⁵

Thus, the Commission made it clear, as recently as April 14, 2003, that any cable/consumer electronics industry standards for bi-directional digital cable receivers would not be adopted into law until they had undergone review and adoption by an appropriate standards organization.³⁶

Clearly, some time after the April 14, 2003, pronouncement in this docket, the Commission lost sight of its congressional mandate and instead, decided to pursue the easier path of simply accepting a private standards recommendation of the cable and consumer electronics industries. In its haste to resolve a controversy that threatened to delay the Commission’s long sought objective of transitioning to digital television, the Commission chose to ignore the law. Indeed, but for the obligatory reference in the ordering clauses, Section 629 of the Act is mentioned only at the very beginning of the Plug & Play Order and then only to fill in the docket’s background. There, the Commission actually quotes Section 629 as requiring the Commission to “... adopt regulations ...” but omits from the quote the all important introductory phrase, “[t]he Commission shall, in consultation with appropriate industry standard-setting organizations, ...”³⁷

Having ignored its statutory mandate, the Commission must now re-visit its requirement that unidirectional digital cable ready products employ the DVI or HDMI interfaces and, at the very least submit these standards to the scrutiny of an appropriate standards setting organization. Further, as we show below, the Commission should take the added step of insisting that these standards be submitted to an accredited standards setting organization

³⁵ *Id.* at 7929 n.11.

³⁶ The Commission has provided no justification, legal or otherwise, for distinguishing between the procedural treatment of bi-directional standards and the unidirectional standards that are the subject of the instant proceeding.

³⁷ Section 629, *supra* note 4.

for formal approval (just as it has promised to do with standards for bi-directional cable receivers) with all of the procedural safeguards that such an organization affords.

III. Past Commission Practice Dictates a Cautious Approach to Standards Adoption

A review of Commission proceedings over the last 50 years reveals that the Commission has never adopted a technical standard that was not the product of an accredited standards setting organization, the work of a federal advisory committee, or the result of an open Commission proceeding in which the proposed standards were tested by Commission staff and subjected to detailed scrutiny by the public. Certainly, until this proceeding, the Commission has never adopted privately developed standards solely on the basis of a voluntary agreement between industries.

In the rare instances where the Commission has adopted a standard that was not developed by an accredited standards setting organization, it has engaged in the laborious process of thoroughly examining competing standards with its own staff and offering the public the complete specifications of the standards it proposed to adopt. In the FM Stereo proceeding, for example, seven privately developed proposed standards were field-tested and analyzed by the National Stereophonic Radio Committee (NSRC), a committee established under the auspices of the Electronic Industries Alliance (EIA).³⁸ The results of the testing and analysis were submitted to the Commission as comments in Docket 13506 in 1960. A detailed description of each system was printed in the Federal Register, and comments were solicited on a comparison of the systems. Finally, because the proposed systems were not the product of an accredited standards setting organization, the Commission required each of the system proponents to supply “information concerning the identity of persons or organizations applying for or holding patents on FM stereophonic broadcast transmission and reception systems and apparatus,

³⁸ Docket No. 13506, *Amendment of Part 3 of the Commission's Rules and Regulations to Permit FM Broadcast Stations to Transmit Stereophonic Programs on a Multiplex Basis*, 25 Fed. Reg. 4257 (May 12, 1960) (“FM Stereo”).

and information with respect to the arrangements that will be employed for the licensing of patents for competitive distribution and use of such systems and apparatus.”³⁹

More recently, in 2000 Biennial Review of Part 68, the Commission established what might be considered a regulatory paradigm for the development of interoperability standards. There, the Commission was dealing with interconnection standards for the public switched telephone network and stated, “[w]e conclude that only standards development organizations that meet the due process requirements for ANSI accreditation for either Organizations or Standards Committees may develop technical criteria for submission” to the Administrative Council for Terminal Attachments (ACTA).⁴⁰ Thus, the Commission acknowledged that the public interest required the adoption of standards that are the product of appropriate standards-setting organizations. For reasons not explained in the instant proceeding, the Commission has chosen to abandon this approach.⁴¹

IV. The DVI and HDMI Standards Were Developed Privately Without the Safeguards of Accredited Standards-Setting Organizations

The DVI and HDMI standards were developed by private organizations whose primary goal is to promote their members’ patented technology. Neither group has a policy of including the views of those who might be affected by the standards they develop, and neither group has any type of policy respecting patent disclosure and the fair and non-discriminatory licensing of such patents.

The DVI and HDMI standards were recommended by two trade groups, the NCTA and CEA, to be a central feature of the MOU leading to the Plug & Play Order in this Docket. NCTA is not a standards-setting organization and while CEA is, in fact, an ANSI-

³⁹ *Id.*

⁴⁰ *In the Matter of 2000 Biennial Regulatory Review of Part 68 of the Commission’s Rules and Regulations*, 15 FCC Rcd. 24,944, 24,964 (2000).

⁴¹ In an apparent approach to rehabilitate the pedigree of the DVI and HDMI standards, the Commission explained in footnote 66 of the Plug & Play Order that they have been included as “normative references” in standards that have undergone the ANSI process. But a reference alone bestows no orthodoxy on the DVI and HDMI standards.

accredited standards-setting organization, CEA played no role in the development of the DVI and HDMI standards and made it clear to the industry that it would not get involved in any patent disputes as these were the responsibility of the organizations which developed the specifications. It should be noted that there is nothing inherently wrong with the activities of such groups. Private standards development occurs all the time, and certainly trade organizations are entitled to pick and choose among the standards that they believe will benefit their members. However, issues of non-discriminatory licensing, and open participation in the creation of standards become of paramount concern when the standards become the focus of government regulation.

By contrast, ANSI-accredited developers and most other open standards organizations have implemented extensive procedures to ensure due process throughout standards setting. The ANSI Policy, Section 1.1 states that:

“[p]articipation shall be open to all persons who are directly and materially affected by the activity in question. There shall be no undue financial barriers to participation. Voting membership on the consensus body shall not be conditional upon membership in any organization, nor unreasonably restricted on the basis of technical qualifications or other such requirements.”⁴²

In addition, ANSI procedures require early disclosure of any patents and pending patents that might bear on a standard under development.⁴³ It is the practice of ANSI working groups, for example, to enforce this policy and require written adherence by all group members at every meeting. Most importantly, the ANSI Policy also requires that any party to the development of a standard agree to license any patent it might hold on reasonable and non-discriminatory terms.⁴⁴

ANSI and similar organizations have internal procedures to enforce their patent policies to maintain the integrity of their standards development process. The ANSI policy states that an ANSI-accredited national standard shall be withdrawn if the ANSI patent policy is

⁴² ANSI Essential Requirements: Due Process Requirements for American National Standards (2003), available at <http://public.ansi.org/ansionline/Documents> (“ANSI Policy”).

⁴³ *Guidelines for Implementation of the ANSI Patent Policy: An Aid to More Efficient and Effective Standards Development in Fields that May Involve Patented Technology* (2003), available at <http://public.ansi.org/ansionline/Documents> (“ANSI Patent Policy”).

⁴⁴ ANSI Policy § 3.1.1.

violated.⁴⁵ A party that feels it has been aggrieved by improper patent licensing practice may bring an action before the ANSI Board of Standards Review (BSR) to have the standard withdrawn. If the BSR agrees, the standard will be withdrawn from ANSI accreditation and the party that acted improperly will lose the benefits of having their patented technology included in a national standard. These safeguards and practices are the main reason why the Commission has traditionally chosen to adopt open standards developed by accredited groups and why Congress insisted on a similar process for cable navigation standards. The alternative, as we have pointed out above, is for the Commission to entangle itself in the patent review process.

Under the Commission's patent policy, as described the ATV proceeding, if a patent underlying a chosen standard is not licensed on a reasonable and non-discriminatory basis, the Commission will take "appropriate action."⁴⁶ This means that the Commission must be prepared to adjudicate disputes concerning the scope of patents, the interpretation of what claims are "necessary" to implement a particular standard, whether undisclosed pending patents create unfair competition, and, of course, whether the terms and conditions of a license are reasonable and non-discriminating. Genesis submits this can only be done accurately, efficiently and legally through the notice and comment procedures of the Administration Procedure Act, on the public record. Accordingly, if the Commission is committed to adopting private standards such as DVI and HDMI, it must modify the Plug & Play Order to approve the DVI and HDMI standards only after full public disclosure and approval by the Commission of patents, pending patents, necessary claims and terms and conditions for licensing the patents.

V. Adequate Notice has not been Provided Under the APA

Although Commission rules require the implementation of DVI or HDMI technology, never during the course of this proceeding has the Commission given notice of the specifications themselves. They were not included in the MOU, the Notice of Proposed Rulemaking, or in the rules adopted by the Plug & Play Order. The record, however, reflects that the Commission staff requested NTCA to supply it with copies of all

⁴⁵ ANSI Policy § 4.2.1.3.4

⁴⁶ ATV, *supra* note 5.

standards referenced in the MOU.⁴⁷ These were dutifully supplied – all except copies of the DVI and HDMI standards, which were withheld without explanation. In the end, the Commission required that the standards be followed but never published them in its rules. Nor did the Commission seek properly to incorporate these standards into its rules “by reference.” Section 552 (a)(1) of the Administrative Procedure Act states that:

Except to the extent that a person has actual and timely notice of the terms thereof, a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the Federal Register and not so published. For the purpose of this paragraph, matter reasonably available to the class of persons affected thereby is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register.⁴⁸

Based on this provision, unless the Commission makes the standards available to the public or formally incorporates them by reference, there is no obligation for the rules to be followed.⁴⁹

It could be argued that with respect to the DVI standard, at least, the specifications, while not in the record, are nonetheless publicly available.⁵⁰ This is not the case, however, with respect to HDMI. As explained above, to obtain a copy of the HDMI specifications a licensee is required to pay \$15,000 up front and a commitment to pay \$15,000 a year thereafter.⁵¹ Under these circumstances, the HDMI specification clearly is not reasonably

⁴⁷ See letter of June 26, 2003 from John P. Wong to Neal Goldberg. As Mr. Wong points out, “[f]or any standards to be incorporated by reference into the FCC rules, we are required to provide copies to the Director of the Federal Register for approval and maintain copies for public inspection.”

⁴⁸ 5 U.S.C. § 552(a)(1).

⁴⁹ The Commission could not incorporate the standards by reference because pursuant to Title 1 C.F.R. Section 51.3(a)(3) incorporation requires a publication to be placed on file with the Federal Register. This, of course, the Commission did not do. Further, pursuant to Section 51.7(a)(4), the publication must be reasonably available to the class of persons affected. As noted above, the HDMI standards are not reasonably available.

⁵⁰ The Commission has neglected to specify which version of the standard it requires to be followed, and so the public is at the mercy of whatever changes to the standard its authors choose to make, without the protective shield of a notice and comment proceeding. (In the “Broadcast Flag” proceeding, the Commission has specified DVI 1.0). Neither has the Commission specified the version of the HDMI standard it demands the public to follow. Without this information, even had the Commission satisfied the other requirements for incorporation by reference it would not have been able to incorporate these standards (See Section 51.1(f)). Under these circumstances, without limiting its regulation to some specific version of the standard, the Commission can hardly argue that it has given the adequate notice required by Section 552 of the Administrative Procedure Act.

⁵¹ HDMI Licensing LLC will provide an “informational” version of the specifications to evaluate whether to license the full standard,” but the full production version - what the Commission has required be

available and the Commission could not have mandated its use consistent with the APA and administrative procedures.

Conclusion.

By requiring the use of the DVI and HDMI standards the Commission is taking a considerable risk, with the public, the potential loser. For unless the Commission can assure reasonable and non-discriminatory access to the DVI and HDMI standards consumers will have to bear the higher costs of television products. As we have shown, the Commission has acted without reviewing the DVI and HDMI adopters agreements, has not made the standards themselves available to the public, and has failed to follow the provisions of Section 629 of the Act. Under these circumstances it is not sufficient for the Commission to agree to hear complaints in the future. Now is the time to address these issues and protect the public.

For the reasons described above, Genesis urges the Commission to reconsider the portion of the Plug & Play Order requiring unidirectional digital cable television devices labeled or marketed as “digital cable ready” to employ a DVI or HDMI digital display interface.

Respectfully Submitted



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followed – can only be obtained by signing the license agreement and paying the \$15,000 and giving up any contract/licensing based defenses if the adopter is sued by the patent holder.