Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of	)	
	)	
Certification of Digital Output Protection Technologies and Recording Methods to be Used in Covered Demodulator Products	)	**MB Docket No. 04-62**
	)	
	)	
Certification of 4C Entity, LLC	)	

OPPOSITION OF THE AMERICAN ANTITRUST INSTITUTE

The American Antitrust Institute ("AAI") submits this opposition to the Certification of the 4C Entity, LLC ("4C") for approval of Content Protection for Recordable Media for Video Recording ("CPRM-Video") as an approved digital content protection recording method.[1] These comments discuss the interests of AAI in this proceeding, the interim criteria for approval of content protection ("CP") technologies adopted by the Commission which promote competitive markets,[2] and the reasons the AAI believes that in its current form the *4C Certification* provides insufficient information to determine whether CPRM-Video is appropriate for use with Covered Demodulator Products by failing to disclose the basis for the joint licensing arrangement by the 4C companies[3] and the identity of the intellectual property ("IP")

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[1] *Certification of 4C Entity, LLC for Approval of its Content Protection Recordable Media for Video Content as an Approved Content Protection Recording Method* ("*4C Certification*"), Docket No. MB 04-62 (filed Mar. 1, 2004).

[2] 47 C.F.R. §73.9008(d)

[3] 4C is a joint-venture of Intel Corporation ("Intel"), International Business Machines Corporation ("IBM"), Matsushita Electric Industrial Co., Ltd. ("MEI") and Toshiba Corporation ("Toshiba").

contributed by each firm, and that the *4C Certification* is not appropriate for approval by failing to sufficiently fulfill pro-competitive criteria.

The Interests of the AAI

The AAI is an independent research, education, and advocacy organization that supports a leading role for competition, as enforced by our antitrust laws and embodied in the public interest mandate of the Commission, within the national and international economy. Background on the AAI may be found at www.antitrustinstitute.org, including participation in other matters involving the telecommunications and media industries.[4]

Among the explicit goals of the Commission in this proceeding is the desire to "foster innovation and marketplace competition."[5] The factors the Commission may consider upon undertaking a full review of a certification include its technological features,[6] the applicable licensing terms,[7] the effect of the proposed technology on consumers' use and enjoyment of unencrypted digital terrestrial broadcast content,[8] and any other relevant factors the Commission determines warrant consideration.[9] Several of the explicit interim criteria bear directly on the development and maintenance of competition in the market for content protection technologies ("CPT market") and in the markets for consumer electronics and

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[4]Funding comes to the AAI through contributions from a wide variety of sources, including several that may have an interest in aspects of these proceedings. More than 70 separate sources each have contributed over $1,000. A full listing is available on request.

[5]*Digital Broadcast Content Protection* (hereinafter, "*Broadcast Flag*"), *Report and Order and Further Notice of Proposed Rulemaking,* MB Docket No. 02-230 (rel. Nov. 4, 2003), at ¶43.

[6]47 C.F.R. §73.9008(d)(1).

[7]47 C.F.R. §73.9008(d)(2).

[8]47 C.F.R. §73.9008(d)(3).

[9]47 C.F.R. §73.9008(d)(4).

information technology products ("CE and IT markets"). The AAI believes that other factors not explicitly recited in the interim Rule also bear on promoting competition in these markets.

Interim Approval Factors that Promote Competition

With respect to the CPT, CE, and IT markets, an aggregation of patent and other IP rights for the purpose of joint package licensing (commonly called a "patent pool") "may provide competitive benefits by integrating complementary technologies, reducing transaction costs, clearing blocking positions, and avoiding costly infringement litigation."[10] However, some joint package licensing arrangements can restrict competition, both within the pool and among downstream products incorporating the pooled patents or in innovation among parties to the pool.[11] The typical competitive analysis of patent pools addresses (1) whether the proposed joint licensing arrangement is likely to integrate complements and (2) if so, whether the resulting competitive benefits are likely to be outweighed by competitive harm posed by other aspects of the arrangement.[12]

To bolster confidence that the competitive benefits of a joint licensing arrangement outweigh its competitive harm (and to gauge the agency's antitrust enforcement intentions), horizontal competitors engaged in joint licensing efforts can avail themselves of the Department of Justice's Business Review Procedure, 28 C.F.R. §50.6. In the absence of such a review, however, and in light of the interim procedure for the approval of CP technologies

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[10]Department of Justice-Federal Trade Commission, *Antitrust Guidelines for the Licensing of Intellectual Property* (the "*IP Guidelines*"), §5.5.

[11]*Id.*

[12]See, *e.g.*, *DOJ Business Review Letter* of June 26, 1997, regarding the MPEG-2 standard; *DOJ Business Review Letter* of December 16, 1998, regarding the Philips-Sony-Pioneer DVD Plan; *DOJ Business Review Letter* of June 10, 1999, regarding the Hitachi-Matsushita-Toshiba DVD Plan; and *DOJ Business Review Letter* of November 12, 2002, regarding the 3G Patent Platform Partnership.

involving horizontal competitors involved in such joint package licensing arrangements, the Commission should endeavor to engage in an analysis similar to that which would be undertaken by the DOJ in its Business Review Procedure. With respect to patent pools, the DOJ has consistently required (1) that only complimentary and essential patents be included, (2) the presence of an independent decision-maker for the determination of essentiality and complementarity and for the resolution of disputes, (3) reasonable and non-discriminatory ("RAND") license terms, (4) the opportunity to negotiate licenses individually with members of the pool, (5) the absence of unduly broad reciprocal IP obligations, and (6) procedures and guidelines for the protection of competitively sensitive information. Proponents of joint package licensing arrangements for CP technologies, therefore, cannot be fully evaluated unless the specific IP conveyed through any proposed license and the identity of its owner is fully disclosed.[13]

In the CPT market, competition can and should be promoted through innovation and interoperability. Compliance rules that lock consumers in to products that employ only one "family" or "class" of CP technologies by permitting interoperability only at the discretion of

[13]Disclosure of IP is important not only to ensure the complementarity of IP aggregated among horizontal competitors and to facilitate independent negotiation, but also in its own right, to facilitate innovation. The major studios agree: "The Commission should also require that, as the American Antitrust Institute proposed, 'all putative licensors of governmentally approved technology should, as a threshold matter, be required to identify any and all patents, copyrights, or trade secrets they deem necessary to the technology being licensed.'" *Reply Comments of the Motion Picture Association of America, Inc., et al.*, to the *Further Notice of Proposed Rulemaking ("FNPRM"), Broadcast Flag Proceeding* (filed Mar. 15, 2004), at 13, quoting *Comments of the American Antitrust Institute* to the *FNPRM, Broadcast Flag Proceeding* (filed Feb. 13, 2004), at 6.

Where reciprocal IP obligations are contained in the license agreements, disclosure of the IP purported to be licensed is particularly important. For a firm with a valuable IP portfolio, no meaningful evaluation of the risks associated with entering into such reciprocal obligations can be undertaken when the license simply conveys the rights to all "necessary claims" without specifying the patent, copyright, or trade secrecy material on which these claims are based.

the licensor should not be approved. Compliance rules should permit protected content to be delivered to or obtained from interfaces and devices employing any "FCC approved" content protection technology, not just from devices that are compliant with a particular specification (or cross-specification). For the development of competition in the CPT market, avoiding such overly strict compliance rules is particularly important with respect to pre-existing CP technologies with a first-mover advantage by virtue of having been approved by content producers and/or other CP owners and having thereby obtained a presence in the CE and IT markets prior to commencement of the *Broadcast Flag* proceeding.

With respect to the CE and IT markets, interoperability plays a key role in preventing bottlenecks between content producers and CE and IT products and in preventing CP technology owners from obtaining artificial control over the entry of products that employ competitive CP technologies. Compliance rules that vest control over interoperability in the hands of CP owners undermine the Commission's desire to foster competition, particularly where such CP technologies enjoy a first-mover advantage.

Before turning to a discussion of the specifics of the *4C Certification*, certain assertions of 4C merit a response. After noting the fact that the Commission does not require that an approved technology be licensed to the public, 4C states that it "does not believe that the Commission should approve or disapprove technologies on the basis of the terms on which they may or may not be offered to third parties. 4C does not believe that government regulation of private contracts is the path to consumer choice."[14]

The Commission's pro-competitive goals cannot be achieved without the evaluation of the private contracts proposed in connection with the certification of CP technologies for

[14] *4C Certification*, at 12, fn 14.

approval. In particular, the "necessary claims" licensing structure, which 4C describes as "a common, and standard, means of patent licensing,"[15] a characterization with which the AAI takes issue, deserves special scrutiny. The fact that the "4C technologies and licensing structure was developed more than 4 years ago, long before the commencement of the Broadcast Flag proceedings or even the industry discussion in the Broadcast Protection Discussion Group,"[16] does not support a "hands-off" approach to the necessary claim licensing structure. Indeed, the first-mover advantages of CPRM-Video described by 4C strongly recommend *in favor* of a careful analysis of this aspect of the *4C Certification*. Present market conditions, and those prior to the commencement of the *Broadcast Flag* proceeding, cannot be characterized as competitive, and the numerosity of existing licensees for CPRM-Video does not equate to a "market determined" outcome.

In the parlance of antitrust jurisprudence, inputs without substitutes that are necessary to compete in a market are known as "essential facilities." Market power in the antitrust literature has often been described as the power to increase prices or lower output beyond their competitive levels. But, just as often, it has been described as the power to exclude competition, and it is in this latter sense that an essential facility conveys or preserves market power. It is well settled that the mere possession of market power, without more, is not unlawful. The approval of private contractual arrangements that serve to perpetuate market power is, however, inconsistent with the Commission's goal of fostering innovation and marketplace competition. To the extent that any particular licensing structure serves to perpetuate market power already acquired, the Commission can and should disapprove of such

[15] *Id.*, at 14.

[16] *Id.*, at 15-16.

a structure if it seriously wishes to attain its pro-competitive goals.[17]

The *4C Certification* Does Not Present Sufficient Information for a Full Review or Satisfy Pro-Competitive Criteria

Apparently, the 4C consortium intends to continue to offer its technologies to the public. The *4C Certification*, therefore, does not present sufficient information for a complete review on its merits. The reasons for the joinder of two CE market participants (Toshiba and MEI) and two IT market participants (Intel and IBM) is nowhere explained in the *4C Certification*.[18] Moreover, an analysis of the competitive effects of the proposed terms on which CPRM-Video will be offered to the public, either as among the 4C companies *inter se* or in the CE and IT markets in which they participate, is not possible without the disclosure of the IP purported to be conveyed. It is impossible to know whether only complimentary IP is included in the package license offered as "essential claims," and adopters can have no opportunity to negotiate individual licenses with the owners of these claims, two hallmarks which the DOJ has recognized as weighing heavily on the side of permitting joint package licensing by horizontal competitors. Moreover, even were a joint package license not implicated in the *4C Certification*, licenses seeking royalties for invalid or unenforceable IP rights raise serious

[17]The fact that the "essential claims" approach to IP licensing exists among other CP licensors does not mean that such a structure is competitively neutral. In the CPT market, the essential facilities characteristics of the technologies have imparted sufficient market power to enable licensors to adopt a "take-it-or-leave-it" approach in which they refuse to negotiate with potential adopters. To the extent that the essential claims approach exists elsewhere, it need not be the result of market power, but is more likely due to the economies of avoiding search and analysis costs which may outweigh the value of the products or services involved. Given the huge economic value of the markets affected by this proceeding, however, search and other costs involved in ensuring full disclosure of licensed IP are likely to be heavily outweighed by the economic benefits of enhanced incentives to innovate, increased competition, and by the share of the U.S. economy affected by the Commission's decisions.

[18]In the case of 4C, anticompetitive concerns are raised by the joint package licensing by two CE companies and two IT companies. In the case of firms whose principal markets are different these concerns would be substantially ameliorated.

anticompetitive concerns, an evaluation that is also impossible without IP disclosure.[19]

Another characteristic of pro-competitive joint package licensing arrangements is the absence of overly broad reciprocal IP obligations. The 4C licenses impose ambiguous non-assertion obligations on adopters,[20] which, for the reasons given above, dampen innovation. Moreover, because of the non-disclosure of the IP purported to be covered by the license, these obligations impose undue risks on adopters with IP assets of their own, and, as a result, discriminate between adopters that are imitators and those that are innovators. The cumulative character of innovation is well-known. Under these license terms, adopters are prohibited from building upon the existing version of the CPRM-Video technology.

Requiring 4C to disclose the source of its necessary claims would not impose an undue burden. For example, the Certification of Victor Company of Japan, Limited ("JVC") for Approval of its "D-VHS" Format as a Digital Content Protection Technology and Recording Method to be Used in Covered Demodulator Products[21] includes an exhibit listing the 10 major U.S. patents it owns that are necessary for implementation of the technology. Other filers have also committed to disclosing the identity of the IP being licensed.

A reciprocal obligation that ensures reasonable and non-discriminatory ("RAND") compensation for innovations[22] is self-evidently more pro-competitive than are reciprocal non-

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[19]See, *e.g., U.S. v. Pilkington plc*, 1994-2 Trade Cas. (CCH) ¶70,842 (D.Ariz., 1994) (consent decree resolving antitrust suit against exclusive licenses premised on expired patents).

[20]*4C Certification,* Ex. 1, §2.7.

[21]*Certification of Digital Output Protection Technologies and Recording Methods to be Used in Covered Demodulator Products, D-VHS Technology,* MB Docket No. 04-68 (filed Mar. 1, 2004), at App. A.

[22]See, *e.g.*, *Philips/Hewlett-Packard Vidi Recordable DVD Protection System Broadcast Flag Certification*, MB Docket No. 04-60 (filed Mar. 1, 2004), §7.3(4).

assertion obligations. Adopters cannot develop innovations that substitute for necessary claims, which cannot be licensed to others, even on RAND terms. Moreover, since the specific IP is not identified, innovator-adopters cannot "opt-out" of licensing specific IP for which it has developed a substitute. Under these conditions, any innovation to the CPRM-Video technology can only be made by 4C, or its founders, a limitation which unreasonably restricts the incentive to innovate.

The proposed 4C adopter license also permits the licensor to make changes to the license terms, particularly to the compliance rules, with "at least thirty (30) days' notice of any material changes to the Compliance Rules."[23] As the licensing entity, 4C is under the direct control of its founders. In the CE market, Toshiba and MEI will enjoy a "first-to-market" advantage *vis-a-vis* its non-founder competitors with respect to new product designs that may be enabled by such changes. This advantage is not cured by giving adopters 30 days' notice, a period of time substantially less than required for product development. Given the absence of an independent entity for change management and license administration (yet another hallmark of pro-competitive joint package license arrangements), this provision has the potential to cause substantial competitive harm. Changes other than minor corrections or modifications of the existing technology should, at a minimum, require review by the Commission.

Interoperability, particularly in connection with products employing first-mover technology, is essential to promoting competitive CE and IT markets. Nonetheless, 4C permits the hand-off of protected content only to "Authorized Secure Digital Outputs approved for

[23] *4C Certification*, Ex. 1, §3.3.2.

CPRM."[24] At present, these include only DTCP and HDCP. In light of the intent of the Commission to authorize several competing CP technologies, there is no technical justification for prohibiting CPRM-compliant devices from outputting protected content to any device employing any "FCC approved" CP technology. Maintaining the "integrity" of 4C as a closed system is not rationally related to any legitimate goal. Rather, its effect is to perpetuate the market power of 4C, discourage entry of non-interoperable products using competing CP technologies, and lock consumers in to a "chain" of a class of "approved" products. Moreover, the 4C license is "all-or-nothing," requiring the use of the entire specification and only CPRM as a recording method in CPRM-compliant devices. This is facially anticompetitive; Product designs should be permitted to use CPRM in connection with other CP technologies to stimulate interoperability and foster a competitive marketplace to the greatest possible extent.

Conclusion

For the reasons stated, the AAI respectfully opposes the *4C Certification* until and unless sufficient information is provided to permit a reasonable evaluation of the competitive effects of its joint package licensing arrangement, and the license terms are modified to more fully satisfy the pro-competitive criteria discussed above.

[24] *4C Certification*, at 7.

Respectfully submitted,

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April 6, 2004