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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY, a California corporation,

Plaintiff,

vs.

HUGHES COMMUNICATIONS, INC., a Delaware corporation, HUGHES NETWORK SYSTEMS, LLC, a Delaware limited liability company, DISH NETWORK CORPORATION, a Nevada corporation, DISH NETWORK L.L.C., a Colorado limited liability company, and DISHNET SATELLITE BROADBAND L.L.C., a Colorado limited liability company,

Defendants.

CASE NO. 2:13-CV-7245 MRP (JEM)

NOTICE OF DECISIONS

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PLAINTIFF'S NOTICE OF U.S. PATENT & TRADEMARK OFFICE DECISIONS CONCERNING U.S. PATENTS 7,116,710, 7,421,032, 7,916,781, AND 8,284,833

Plaintiff California Institute of Technology ("Caltech") respectfully submits this notice of recent decisions by the U.S. Patent & Trademark Office Patent Trial and Appeals Board ("PTAB") relevant to the four patents in suit.

On October 14, 2014, and October 17, 2014, Hughes Network Systems, L.L.C. and Hughes Communications, Inc. ("Petitioners") filed a total of six petitions for *inter partes* review of the patents-in-suit, United States Patents 7,116,710 (the "'710 patent"), 7,421,032 (the "'032 patent"), 7,916,781 (the "'781 patent"), and 8,284,833 (the "'833 patent").

On April 27, 2015, the PTAB entered its decisions regarding the petitions for *inter partes* review. The PTAB conclusively rejected five of the petitions in their entirety, finding for each of these five petitions that the information presented by the petitioner does "not establish a reasonable likelihood that Petitioner would prevail." Institution Decision, Case IPR2015-0060, at 2; Institution Decision, Case IPR2015-0061, at 2; Institution Decision, Case IPR2015-0067, at 2; Institution Decision, Case IPR2015-0068 at 2; Institution Decision, Case IPR2015-0081 at 2. In the sixth petition, the PTAB rejected Petitioner's challenge to the majority of the claims and instituted a review of claims 1 and 2 of the '781 patent. This pending *inter partes* review, however, relates only to claims that are not the subject of any of Caltech's infringement claims.

More specifically, in petition IPR 2015-0060, Petitioners requested review of the '032 patent. Petitioners asserted claims 1, 8, 10, 18, 19, and 22 of the '032 patent are unpatentable pursuant to 35 U.S.C. § 103 in light of combinations of

Frey[1], Divsalar[2], Luby[3], Kschischang[4], Hall[5], and Ping[6]. The PTAB rejected Petitioners' assertions.

In petition IPR2015-0061, Petitioners requested review of claims 1, 2, 4, 6, 8-11, and 13 of the '833 patent. Petitioners asserted that the claims of the '833 patent are unpatentable pursuant to 35 U.S.C. § 103 in light of the combinations of Ping, Hennessy[7], Luby, and Divsalar. The PTAB again rejected Petitioners' assertions.

In petition IPR2015-0067, Petitioners requested review of claims 1, 3-6, 15, 16, and 20-22 of the '710 patent. Petitioners claimed the '710 patent is unpatentable pursuant to 35 U.S.C. § 102 in light of Frey, and unpatentable pursuant to 35 U.S.C. § 103 in light of the combinations of Frey with Divsalar, Hall, and Ping. The PTAB rejected Petitioners' assertions.

In petition IPR2015-0068, Petitioners requested review of claims 1, 3-6, 15, 16, and 20-22 of the '710 patent. Petitioners claimed that these claims of the '710 patent are unpatentable pursuant to 35 U.S.C. § 103 in light of combinations of Divsalar, Luby, Ping, and Hall. The PTAB rejected Petitioners' assertions.

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[1] Brendan J. Frey & David J.C. MacKay, *Irregular Turbocodes*, Proceedings of the 37th Annual Allerton Conference on Communication, Control, and Computing, 1999, at 1–7 ("Frey").

[2] Divsalar et al., *Coding Theorems for 'Turbo-Like' Codes*, Thirty-Sixth Annual Allerton Conference on Communication, Control, and Computing, Sept. 23–25, 1998, at 201–209 ("Divsalar").

[3] U.S. Patent No. 6,081,909, application filed November 6, 1997 ("Luby").

[4] F. R. Kschischang & B. J. Frey, *Iterative decoding of compound codes by probability propagation in graphical models*, 16 IEEE Journal on Selected Areas in Communications 219–230 (1998) ("Kschischang").

[5] Eric K. Hall and Stephen G. Wilson, *Stream-Oriented Turbo Codes*, 48TH IEEE Vehicular Technology Conference, 1998, at 71–74 ("Hall").

[6] Li Ping et al., *Low Density Parity Check Codes with Semi-Random Parity Check Matrix*, 35 IEEE Electronics Letters 38–39 (1999) ("Ping").

[7] Hennessy et al., Computer Organization & Design, The Hardware /Software Interface, Morgan Kaufmann Publishers, Nov. 8, 1994 ("Hennessy").

In petition IPR2015-0081, Petitioners requested review of claims 1, 2, 4, 6, 8-11, and 13 of the '833 patent. Petitioner asserted that these claims of the '833 patent are unpatentable as anticipated by MacKay[8] pursuant to 35 U.S.C. § 102 and obvious pursuant to 35 U.S.C. § 103 in light of combinations of MacKay with Kernighan[9] and Hennessy. The PTAB rejected these assertions and concluded that the MacKay software does not qualify as prior art. Institution Decision, Case IPR2015-0081 at 9.

In petition IPR2015-0059, Petitioners requested review of claims 1–7, 13–16, and 19 of the '781 patent. Petitioners claimed that claims 1 and 2 are unpatentable as anticipated by Divsalar pursuant to 35 U.S.C. § 102, and 1–3, 5–7, and 19 were unpatentable as anticipated by Ping pursuant to 35 U.S.C. § 102. Petitioners also asserted that claims 2-7, and 13-16 were unpatentable as obvious pursuant to 35 U.S.C. § 103 in light of Ping in combinations with Luby and Patterson[10]. The PTAB rejected all of Petitioners' assertions with respect to Ping and the combinations with Ping, but instituted a proceeding only with respect to claims 1 and 2. This petition therefore deals with claims that are not asserted in the current action.

The PTAB has now considered Petitioners' prior art assertions in their *inter partes* reviews, including assertions of invalidity on the same prior art being asserted in the current action. With respect to the asserted claims of the patents at issue in the current case, all of Petitioners' prior art challenges have been rejected as not having a reasonable likelihood of success under the "preponderance of the evidence" standard, a lower standard than the "clear and convincing evidence" standard applicable in district court. By statute, the PTAB's decision is final and

[8] MacKay Ra.c Software File ("MacKay").

[9] Kernighan et al., The C Programming Language, Prentice Hall Software Series, 1988 ("Kernighan").

[10] U.S. Patent No. 4,623,999, application filed June 4, 1984 ("Patterson").

Defendants are precluded from appealing the PTAB's decision not to institute an inter partes review to the Court of Appeals Federal Circuit. 35 U.S.C. § 314.

Copies of the decisions are attached to this notice.

DATED: April 28, 2015

Respectfully submitted,

By /s/ *James R. Asperger*

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