LETTER OF ASSURANCE FOR ESSENTIAL PATENT CLAIMS

Please return via mail, PatCom Administrator, IEEE-SA Standards Board Patent Committee e-mail (as a PDF), or fax: Institute of Electrical and Electronics Engineers, Inc. 445 Hoes Lane Piscataway, NJ 08854 USA FAX (+1 732-875-0524) e-mail: patcon@icee.org
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A. SUBMITTER:

Legal Name: CSR, plc

B. SUBMITTER'S CONTACT INFORMATION (for the purpose of licensing information):

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URL: www.csr.com Contact Name/Title: Anne McAleer, Patent Manager

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C. IEEE STANDARD OR PROJECT (e.g., AMENDMENT, CORRIGENDA, OR REVISION):

limited to the following: In accordance with Clause 6.3.5 of the IEEE-SA Standards Board Operations Manual, this licensing position is

Title: IEEE Standard for Information Technology - ... Specific requirements Part 11:
Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications

D. SUBMITTER'S POSITION REGARDING LICENSING OF ECCEPTION

(Check box I or box 2 below): In accordance with Clause 6 of the IEEE-SA Standards Board Bylaws, the Submitter hereby declares the following

Note: Nothing in this Letter of Assurance shall be interpreted as giving rise to a duty to conduct a patent search. The IEEE takes no position with respect to the validity or essentiality of Patent Claims or the reasonableness of rates, terms, and conditions provided in connection with submission of a Letter of Assurance, if any, or in any license agreements offered by the Submitter. To the extent there are inconsistencies between the Letter of Assurance Form and any sample licenses, material licensing terms, or not to exceed rates provided in connection with 1.a. or 1.b. below, the terms of the Letter of Assurance Form shall control.

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(Optional) A sample of such a license (or material licensing terms) that is substantially similar to what the Submitter would offer is attached.	a. The Submitter will grant a license without compensation to an unrestricted number of applicants on a worldwide basis with reasonable terms and conditions that are demonstrably free of unfair discrimination.	1. The Submitter may own, control, or have the ability to license Patent Claims that might be or become Essential Patent Claims. With respect to such Essential Patent Claims, the Submitter's licensing position is as follows (must check a, b, c, or d and any applicable subordinate boxes):

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(Optional) A sample of such a license (or material licensing terms) that is substantially similar to what the Submitter would offer is attached.	ial licensing terms) that is substantially similar
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The Submitter may, but is not required to, identify one or more of its Patent Claims that it believes might be or become Essential Patent Claims. (Submitter must check box 1 or box 2 below)	Patent Claims that it believes might be or : 2 below)
1. When checked, this Letter of Assurance only applies to the Patent Claims identified below that are or become Essential Patent Claims. (If no Patent Claim is identified below, then this Letter of Assurance applies to all Essential Patent Claims supported by the disclosure in the patent or patent applications listed below.)	Patent Claims identified below that are or entified below, then this Letter of Assurance closure in the patent or patent applications
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Patent/Application/Docket Number: Description/Title (optional):	
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For additional patents, use additional pages as necessary.	
2. When checked, this Letter of Assurance is a Blanket Letter of Assurance. As such, all Essential Patent Claims that the Submitter may currently or in the future have the ability to license shall be available under the terms as indicated above in part D.I.; however, a Blanket Assurance shall not supersede any pre-existing or simultaneously submitted specific assurance identifying potential Essential Patent Claims	r of Assurance. As such, all Essential Patent ave the ability to license shall be available Blanket Assurance shall not supersede any identifying potential Essential Patent Claims.

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With respect to any Essential Patent Claims that an Affiliate has the ability to license, the Submitter agrees that (i) the licensing positions described in parts C and D above apply to any Essential Patent Claims within the scope of the assurance described in part E; and (ii) the terms of this assurance are binding on each such Affiliate; provided, however, that such representations and commitments shall not apply to Affiliates identified below:

Organization's Name	Organization's Name
Address	Adiress
Contact person	Contact person

For additional Affiliates, use additional pages as necessary.

G. SIGNATURE:

those Affiliates excluded above) agree not to sell or otherwise transfer any rights in any Essential Patent Claims that they hold, control, or have the ability to license with the intent of circumventing or negating any of the By signing this Letter of Assurance, you represent that you have the authority to bind the Submitter and all Affiliates (other than those Affiliates excluded above) to the representations and commitments provided in this LOA and acknowledge that users and implementers of the [Proposed] IEEE Standard identified in part C above are relying or representations and commitments made in this LOA. will rely upon and may seek enforcement of the terms of this LOA. The Submitter and all Affiliates (other than

The Submitter agrees (a) to provide notice of a Letter of Assurance either through a Statement of Encumbrance or by binding any assignee or transferee to the terms of such Letter of Assurance; and (b) to require its assignee or transferee to similarly provide such notice and (ii) to bind its assignees or transferees to agree to provide such notice as described in (a) and (b).

If, as described in Clause 6 of the IEEE-SA Standards Board Bylaws, the Submitter becomes aware of additional Patent Claims not already covered by an existing Letter of Assurance that are owned, controlled, or licensable by the Submitter that may be or become Essential Patent Claims with respect to the standard identified in C above, the Submitter agrees to submit a Letter of Assurance stating its position regarding enforcement or licensing of such Patent Claims.

Print name of authorized person: James Collier

Title of authorized person: Chief Technical Officer

Signature of authorized person: Technical Officer

Mayor Muly Date Date: 6|3|2009

Address: Unit 400, Cambridge Science Park, Milton Road, Cambridge, CB4 OWH GB

Phone: +44 1223 692279 E-mail: james collier@csr.com

Note: This assurance applies from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable upon acceptance by the IEEE-SA.

The IEEE Patent Policy and the procedures used to execute that policy are documented in the IEEE-SA Standards Board Bylaws and the IEEE-SA Standards Board Operations Manual, available at http://standards.ieee.org/resources/index.htmlHguides. The terms and definitions set forth in the IEEE Patent Policy Letter of Assurance are incorporated herein IEEE-SA Standards Board Bylaws, and IEEE-SA Standards Board Operations Manual in effect as of the date of this

DEFINITIONS

The following terms, when capitalized, have the following meanings:

"Accepted Letter of Assurance" and "Accepted LOA" shall mean a Letter of Assurance that the IEEE-SA has determined is complete in all material respects and has been posted to the IEEE-SA web site.

to nonprofit entities, means the power to elect or appoint more than fifty percent (50%) of the Board of Directors of interest, if not a corporation) of an entity ordinarily having voting rights. "Control" and its derivatives, with respect equitable ownership, directly or indirectly, of more than fifty percent (50%) of the capital stock (or other ownership definition, the term "control" and its derivatives, with respect to for-profit entities, means the legal, beneficial or Submitter, is controlled by the Submitter, or is under common control with the Submitter. For the purposes of this "Affiliate" shall mean an entity that directly or indirectly, through one or more intermediaries, controls the

"Blanket Letter of Assurance" shall mean a Letter of Assurance that applies to all Essential Patent Claims for which a Submitter may currently or in the future (except as otherwise provided for in these Bylaws and in the IEEE-SA Standards Board Operations Manual) have the ability to license

in the [Proposed] IEEE Standard (e.g., semiconductor manufacturing technology, compiler technology, objectthereof that complies with the [Proposed] IEEE Standard but is neither explicitly required by nor expressly set forth oriented technology, basic operating system technology, and the like) "Enabling Technology" shall mean any technology that may be necessary to make or use any product or portion

non-infringing afternative. An Essential Patent Claim does not include any Patent Claim that was essential only for Enabling Technology or any claim other than that set forth above even if contained in the same patent as the Essential Patent Claim. when, at the time of the {Proposed] IEEE Standard's approval, there was no commercially and technically feasible implementation of either mandatory or optional portions of the normative clauses of the [Proposed] IEEE Standard "Essential Patent Claim" shall mean any Patent Claim the use of which was necessary to create a compliant

"Letter of Assurance" and "LOA" shall mean a document, including any attachments, stating the Submitter's position regarding ownership, enforcement, or licensing of Essential Patent Claims for a specifically referenced IEEE Standard, submitted in a form acceptable to the IEEE-SA.

"Patent Claim(s)" shall mean one or more claims in issued patent(s) or pending patent application(s)

by, or represent the Submitter and who the Submitter believes are most likely to have knowledge about the to the Submitter to be current or past participants in the development process of the [Proposed] IEEE Standard and contact those individuals who are from, employed by, or otherwise represent the Submitter and who are known technology covered by the [Proposed] IEEE Standard include, but is not limited to, the Submitter using reasonable efforts to contact individuals who are from, employed Group. If the Submitter did not or does not have any participants, then a Reasonable and Good Faith Inquiry may identified in a Letter of Assurance, including, but not limited to, participation in a Sponsor Ballot or Working "Reasonable and Good Faith Inquiry" includes, but is not limited to, a Submitter using reasonable efforts to identify

encumbrances that may exist as of the effective date of such agreement. An Accepted LOA is an encumbrance. transfer or assignment agreement that the Patent Claim(s) being transferred or assigned are subject to any "Statement of Encumbrance" shall mean a specific reference to an Accepted LOA or a general statement in the

provides a completed Letter of Assurance. A Submitter may or may not hold Essential Patent Claims "Submitter" when used in reference to a Letter of Assurance shall mean an individual or an organization that

Bylaws clause 6.1, the definitions contained in the Bylaws shall control Should any discrepancy exist between the definitions above and the definitions in the IEEE-SA Standards Board