

**NECESSARY CLAIMS DECLARATION  
(APPLIES TO BOTH PROMOTER MEMBERS AND PARTICIPANTS)**

Please return or FAX to: Executive Director, ZigBee Alliance  
c/o Global Inventures  
2400 Camino Ramon, Suite 375  
San Ramon, CA 94583 USA  
PHONE (+1 925-275-6607) FAX (+1 925-275-6691)

Disclosure Period: July 29, 2004 to Oct. 27, 2004
--

*This Declaration is made in accordance with and subject to the ZigBee Alliance Intellectual Property Rights Policy*

**A. ZIGBEE ADOPTED SPECIFICATION or ZIGBEE PROPOSED SPECIFICATION:**

Number: 02130r8

Title: Network Specification (Revision 8, July 23, 2004)

**B. MEMBER ORGANIZATION:**

Legal Name of Member Organization: EMBER CORPORATION

If the Member is completing this Declaration to disclose Necessary Claims of an Affiliate or Non-Member, the Member must provide the following information:

Legal Name of  Affiliate or  Non-Member (check one): \_\_\_\_\_

Member is authorized to act on behalf of Affiliate or Non-Member (check one):  Yes or  No

**C. CONTACT FOR LICENSE TERMS AND CONDITIONS:**

Name of Organization: EMBER CORPORATION

Name of Individual & Department: VENKAT K. BAKL

Address: 243, CONGRESS STREET, BOSTON, MA 02210

Telephone: 617 951 1222 Fax: 617 951 0200 E-mail: venkat@ember.com

**D. POSITION REGARDING LICENSING OF NECESSARY CLAIMS:**

If the Member owns, has a right to, or is aware of any Necessary Claims, please specify the patent number, patent application number and/or relevant claims.

Patent/Patent application number(s): (A) US Application S/N 10/457,205 (Pub. US-2004-0165532-A1)  
(B) PCT Application S/N US03/18000 (Pub. WO WO03/105356)  
(C) US Provisional App. S/N 60/546,048 (unpublished)

Relevant Claims: (A) Claims 27 and 29-32  
(B) Claims 27 and 29-32  
(C) Claims 1-2, 8 and 13-14

Describe the nature, extent, and scope of the Necessary Claims (attach additional pages, if necessary):

Network Specification (Revision 8, July 23, 2004), Section 10.3, relates to routing according to link costs based on probability of packet delivery over particular links. More particularly, section 10.3.1 relates to use of average per-frame Link Quality Indicator (LQI) values provided by the IEEE 802.15.4-2003 MAC and PHY layers as a basis for determining link costs. One or more of the relevant claims identified above, or other claims of the listed applications that are now pending or that may be introduced during prosecution of the listed applications or their continuations and/or national phase applications, would necessarily be infringed an implementation of the specification. For example, one or more of the claims relate to computing link costs according to radio transmission characteristics between nodes, and distributing link data characterizing link reliability between neighboring nodes.

With respect to licensing such Necessary Claims, Member declares as follows (*check one box only*):

- 1. The Member is prepared to grant a Royalty Free License to the Alliance, Promoter Members and Participants.
- 2. The Member will grant a fee-based license to the Alliance, Promoter Members and Participants on mutually acceptable terms and conditions to comply with the ZigBee Proposed Specification or Adopted Specification. (Member must provide the information requested in Attachment A to this Declaration)
- 3. The Member disclosed the Necessary Claims of an Affiliate or Non-Member, but the Member is not authorized to grant licenses on behalf of such Affiliate or Non-Member according to the provisions of either 1 or 2 above.
- 4. The Member is not aware of any Necessary Claims.

**E. SIGNATURE:**

Print name of authorized person: Todd Miceli

Title of authorized person: CFO

Signature of authorized person: Todd Miceli Date: 10/27/04

**February, 2004**

**ZigBee <doc#>**

**ATTACHMENT A**

The information requested below is to be provided by any Member that checked **Box 2** of **Section D** (Position Regarding Licensing of Necessary Claims) of the Necessary Claims Declaration:

1. The Member shall disclose all portion(s) of the Proposed Specifications which involve any Necessary Claims (including without limitation, any Necessary Claims of an Affiliate or a Non-Member).

---



---



---



---



---



---

2. The Member shall disclose any terms and conditions applicable to the license of any Necessary Claims (including without limitation, any Necessary Claims of an Affiliate or a Non-Member).

---



---



---



---