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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

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David J. Kappas

Director of the United States Patent and Trademark Office



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(12) **United States Patent**
Elleuch et al.

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(54) **SESSION MOBILITY IN A FULL-MESH CONFERENCE USING SESSION INITIATION PROTOCOL**

(52) **U.S. CL.** **709/228; 379/158; 370/260; 370/331; 370/332; 370/254**

(58) **Field of Classification Search** **709/228, 709/203-206; 379/158; 370/260, 331, 332, 370/254**

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See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

7,415,026 B2 * 8/2008 Hsu et al. 370/395.3
7,583,657 B1 * 9/2009 Webster et al. 370/352
7,715,309 B2 * 5/2010 Scholl et al. 370/218
2003/0149772 A1 * 8/2003 Hsu et al. 709/227
2005/0063324 A1 * 3/2005 O'Neill et al. 370/310

(Continued)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 49 days.

OTHER PUBLICATIONS

International Search Report dated Jul. 14, 2008 issued from the International Patent Application No. PCT/CA2008/000606, pp. 2-4.

(Continued)

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(57) **ABSTRACT**

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There is described a method for enabling session mobility in a multi-participant IP-based multi-media communication network in full-mesh conference model, the method comprising: mapping a full-mesh communication protocol to a Session Initiation Protocol (SIP); defining an extended message protocol including new message mechanisms to support session mobility options; mapping the extended message protocol to the Session Initiation Protocol; and adding headers to mapped messages from the extended message protocol and from the full-mesh communication protocol to comply with full-mesh message signalization protocol mechanisms.

Related U.S. Application Data

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20 Claims, 7 Drawing Sheets

(51) **Int. Cl.**
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