

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
5 October 2006 (05.10.2006)

PCT

(10) International Publication Number  
**WO 2006/105207 A3**

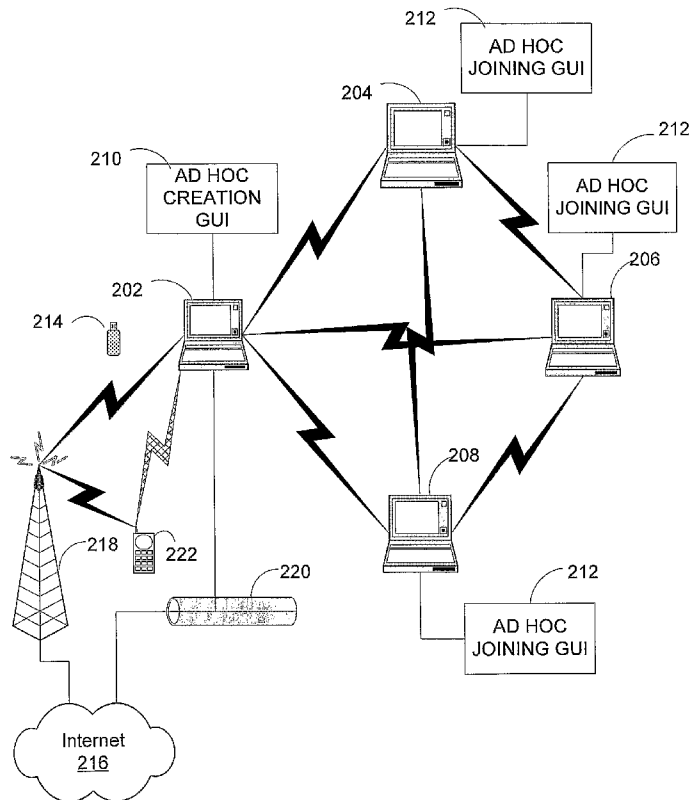
- (51) International Patent Classification:  
*H04L 12/28* (2006.01)    *H04Q 7/24* (2006.01)
- (21) International Application Number:  
PCT/US2006/011485
- (22) International Filing Date: 28 March 2006 (28.03.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
11/096,042    31 March 2005 (31.03.2005)    US
- (71) Applicant (for all designated States except US): **MI-CROSOFT CORPORATION** [US/US]; One Microsoft Way, Redmond, Washington 98052-6399 (US).
- (72) Inventors: **GATTA, Srinivas Raghu**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **DUP-LESSIS, Jean-Pierre**; One Microsoft Way, Redmond,

Washington 98052-6399 (US). **GUVEN, Savas**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **MANCHESTER, Scott**; One Microsoft Way, Redmond, Washington 98052-6399 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,

[Continued on next page]

(54) Title: SIMPLIFIED CREATION AND TERMINATION OF AN AD HOC WIRELESS NETWORK WITH INTERNET CONNECTION SHARING



(57) Abstract: Methods and systems are described for simplified creation of, connection to, and termination from an ad hoc wireless network. Graphical user interfaces are used to guide users through creation and joining ad hoc network. The option to share one user's Internet connection with the entire ad hoc network is also described. The ad hoc networks described can provide some managed services traditionally unavailable in ad hoc networks, such as IP address assignment and name resolution services. The ad hoc networks can be created with termination criteria, such that a computer's connection to the ad hoc network is automatically terminated and previous network configuration settings are restored when one or a combination of termination criteria are met.

WO 2006/105207 A3



RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

**(88) Date of publication of the international search report:**  
26 April 2007

**Published:**

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/11485

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **H04L 12/28( 2006.01);H04Q 7/24( 2006.01);G06F 15/177( 2006.01)**  
  
 USPC: 370/254,338;709/222  
 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**  
 Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 370/254,255,338;709/222-226  
  
 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
  
 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,449,642 B1 (BOURKE-DUNPHY et al) 10 September 2002 (10.09.2002).	1-20
A	US 6,571,286 B2 (FISHER et al) 27 May 2003 (27.05.2003).	1-20
A	US 2004/0002943 A1 (MERRILL et al) 1 January 2004 (01.01.2004).	1-20
A	US 2004/0010429 A1 (VEDULA et al) 15 January 2004 (01.15.2004).	1-20

Further documents are listed in the continuation of Box C.  See patent family annex.

* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search: 05 January 2007 (05.01.2007)  
 Date of mailing of the international search report: **27 FEB 2007**

Name and mailing address of the ISA/US:  
 Mail Stop PCT, Attn: ISA/US  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 Facsimile No. (571) 273-3201

Authorized officer: *JH*  
 Jordan Hamann  
 Telephone No. (571) 272-8564