



- (51) **International Patent Classification:**
H04W 48/02 (2009.01) *H04W 88/02* (2009.01)
- (21) **International Application Number:**
PCT/US2011/065277
- (22) **International Filing Date:**
15 December 2011 (15.12.2011)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
12/970,298 16 December 2010 (16.12.2010) US
- (71) **Applicant (for all designated States except US):** **MICROSOFT CORPORATION** [US/US]; One Microsoft Way, Redmond, Washington 98052-6399 (US).
- (72) **Inventors:** **TIWARI, Abhishek**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **AMARAVADI, Rama Krishna**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **PANDYA, Raunak**; c/o Microsoft Cor-

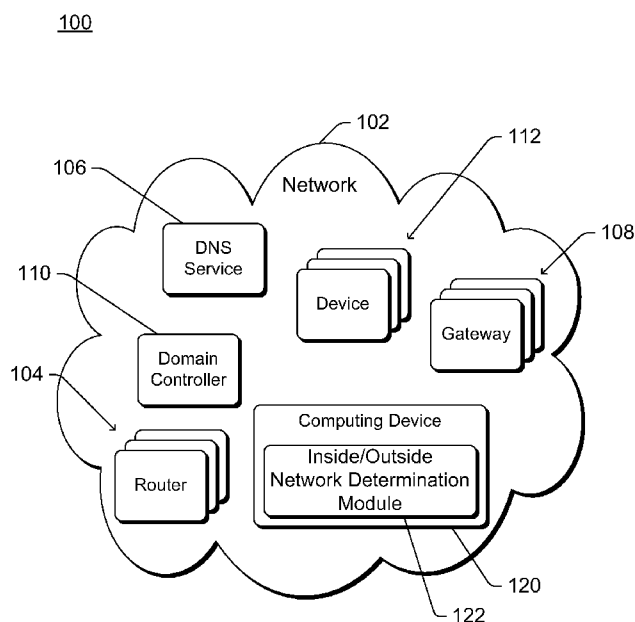
poration, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **JAIN, Alok**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US).

- (81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,

[Continued on next page]

- (54) **Title:** DETERMINING WHETHER A DEVICE IS INSIDE A NETWORK

**Fig. 1**

- (57) **Abstract:** A network address of a computing device is obtained, and an unencrypted request is sent to a resource access manager of a particular network. If both a response is received from the resource access manager and the computing device has a network address within a desired range of network addresses, then a determination is made that the computing device is inside the particular network. Otherwise, a determination is made that the computing device is outside the particular network.



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

Published:**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))*

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:

26 October 2012

A. CLASSIFICATION OF SUBJECT MATTER***H04W 48/02(2009.01)i, H04W 88/02(2009.01)i***

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)

H04W 48/02; G06F 11/30; G06F 15/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: determine, decide, locate, range, position, inside, access, request, address

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003-0097589 A1 (TUOMO SYVANNE) 22 May 2003	1-2,6-7
A	See paragraphs [0024], [0025], [0028]; fig. 3. See whole document.	3-5,8-10
Y	US 2006-0212601 A1 (THOMAS H. HAMPTON) 21 September 2006	1-2,6-7
A	See paragraphs [0021]-[0024]; figs. 1, 2. See whole document.	3-5,8-10



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

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"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

"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

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search

16 AUGUST 2012 (16.08.2012)

Date of mailing of the international search report

28 AUGUST 2012 (28.08.2012)

Name and mailing address of the ISA/KR

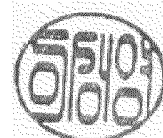
Korean Intellectual Property Office
189 Cheongsu-ro, Seo-gu, Daejeon Metropolitan
City, 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

Lee Seoung Young

Telephone No. 82-42-481-8591



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2011/065277

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003-0097589 A1	22.05.2003	DE 60213391 D1	07.09.2006
		DE 60213391 T2	07.12.2006
		EP 1379046 A1	07.01.2004
		EP 1379046 B1	26.07.2006
		US 7360242 B2	15.04.2008
US 2006-0212601 A1	21.09.2006	US 7062572 B1	13.06.2006
		US 7657655 B2	02.02.2010