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61/485,201 12 May 2011 (12.05.2011) US(71) Applicant (for all designated States except US): **HUAWEI TECHNOLOGIES, CO., LTD.** [CN/CN]; Huawei Administration Building, Bantian, Longgang District, Shenzhen, Guangdong 518129 (CN).

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(54) Title: METHOD AND SYSTEM FOR LONGEST PREFIX MATCHING OF VARIABLE-SIZED HIERARCHICAL NAMES BY TREELETS

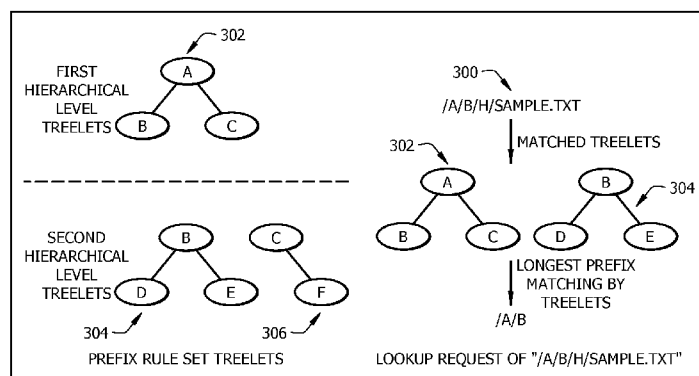


FIG. 3

(57) Abstract: A method for determining a location of a requested resource, comprising receiving a request for a resource, wherein the resource is identified by a hierarchically structured name, decomposing the hierarchically structured name into a plurality of segments, comparing each of the plurality of segments to parent nodes of a plurality of two-level treelets, wherein the comparing of at least two of the plurality of segments to parent nodes of the plurality of two-level treelets is performed in a parallel manner, wherein combinations of two-level treelets comprise a hierarchical name of a network resource, and determining a longest prefix match of the hierarchically structured name.



INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F17/30
ADD.

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)
G06F

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)

EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/005288 A2 (IBM [US]; IBM UK [GB]) 16 January 2003 (2003-01-16) the whole document	1-20
X	EP 2 214 357 A1 (PALO ALTO RES CT INC [US]) 4 August 2010 (2010-08-04) the whole document	1-20



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INTERNATIONAL SEARCH REPORT

Information on patent family members

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