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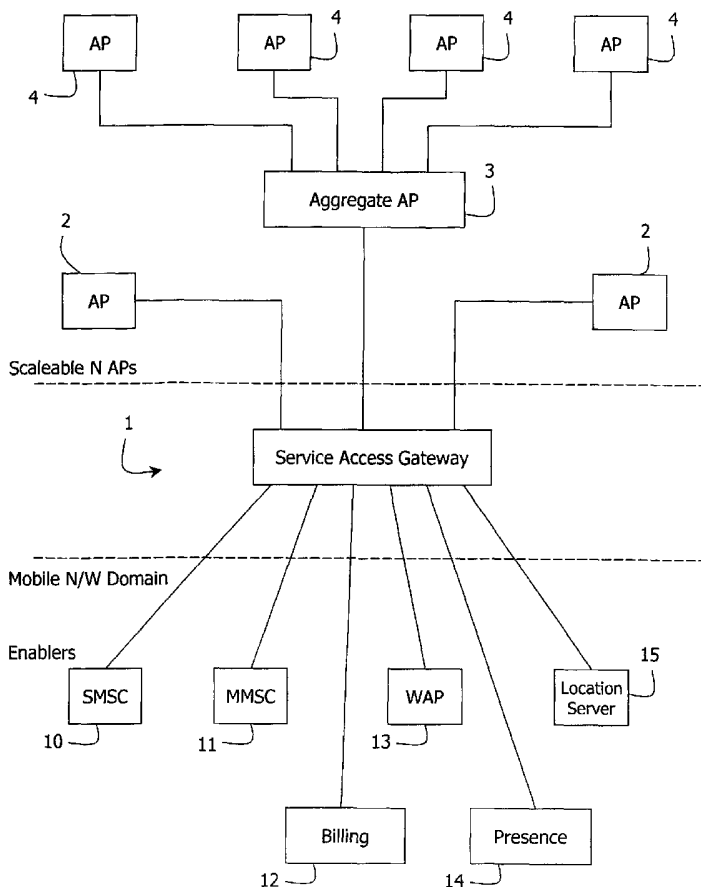
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

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[Continued on next page]

(54) Title: A SERVICE ACCESS GATEWAY



(57) Abstract: A gateway (1) interfaces between application providers (APs, (4)) and at least one aggregate AP (3) which in turn is linked to multiple APs (4). The gateway (1) manages cascading of access control rights by the APs (4) to reflect links via aggregate APs (3). On the other side the gateway (1) is linked with mobile network enablers (10-15) for communication with users. The gateway (1) performs convergence by conditionally processing or rendering content with multiple content and/or bearer formats. Internally, the gateway (1) comprises a CORBA middleware mechanism (20), and multiple services (21-23) communicating with each other via the middleware mechanism.

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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/11417

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04L12/66

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)  
IPC 7 H04L H04Q 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 practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 1 179 960 A (TLC TRANSPORT INFORMATIK U LOG) 13 February 2002 (2002-02-13) the whole document	1, 2, 8, 19-21 9-11, 22-25
A	WO 00/48365 A (ERICSSON TELEFON AB L M) 17 August 2000 (2000-08-17) page 5, lines 2-7 page 7, lines 15-21; claim 1	1, 2, 6-9, 19-25
A	WO 01/28186 A (BROADSOFT INC) 19 April 2001 (2001-04-19) the whole document	1, 2, 6, 11, 16, 18
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Further documents are listed in the continuation of box C.

Patent family members are listed in 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 document 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 another 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

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**INTERNATIONAL SEARCH REPORT**

International Application No  
PCT/EP 03/11417

**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/43390 A (MCGEE BRENDAN ;CORRIGAN LOUIS (IE); DOYLE JOHN (IE); HARTE ROBERT) 14 June 2001 (2001-06-14)	1,26
A	page 7, lines 1-3 page 8, lines 3,4,9-14 page 11, lines 4-6 page 19, lines 11,12 page 22, lines 11,12,17,18 page 25, lines 16-24	27-29
P,X	----- EP 1 331 784 A (TRIC AB) 30 July 2003 (2003-07-30) column 1, paragraph 9 column 3, paragraph 21 column 4, lines 52-55	1,26
A	----- NEUMAN B C ED - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS: "Proxy-based authorization and accounting for distributed systems" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON DISTRIBUTED COMPUTING SYSTEMS. PITTSBURGH, MAY 25 - 28, 1993, LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. CONF. 13, 25 May 1993 (1993-05-25), pages 283-291, XP010095707 ISBN: 0-8186-3770-6 page 286, column 1, last paragraph -----	26,27

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP 03/11417

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

As a result of the prior review under R. 40.2(e) PCT,  
no additional fees are to be refunded.

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1,2,6-11,15-25,30

An access gateway providing conversion of all external protocols into a gateway internal protocol

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2. claims: 26-29

An access gateway providing an access control authorization function

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/11417

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