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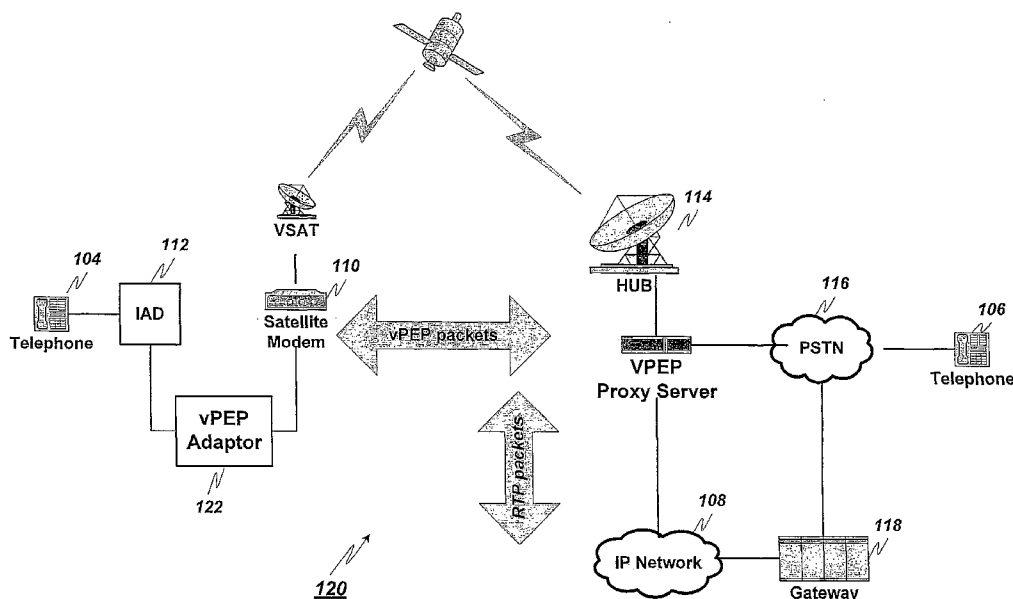
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(54) Title: PERFORMANCE ENHANCEMENT PROTOCOL, SYSTEMS, METHODS AND DEVICES



(57) Abstract: A method, operative in a framework which uses a packet-based voice communications scheme and in which at least some of the communication takes place via a satellite link. The method includes establishing a first session between a calling party and proxy using a first protocol, wherein the calling party communicates with the proxy via the satellite link; and establishing a second session between the proxy and a called party using a second protocol distinct from the first protocol, and providing communications from the calling party to the second party and from the second party to the first party.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US06/30285

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - H04L 12/66 (2007.01)
 USPC - 370/356
 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(8) - H04B 7/00, 7/185; H04L 12/66; G06F 15/16 (2007.01)
 USPC - 370/310, 316, 317, 356; 709/227, 230

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)
 Patbase (All)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	US 2004/0199649 A1 (TARNANEN et al) 07 October 2004 (07.10.2004) entire document	1-3 ----- 4
Y	US 2003/0202506 A1 (PERKINS et al) 30 October 2003 (30.10.2003) entire document	4

Further documents are listed in the continuation of Box C.

* 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 but 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	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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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: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/30285

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claims 1-4, drawn to a method operative in a framework which uses a packet-based voice communications scheme and in which at least one communication takes place via a satellite link.

Group II, claims 5-7, drawn to a method of a near-end telephone device communication with a far-end telephone device in a Voice-over-IP-based system.

Group III, claims 8-10, drawn to a communication device connectable to a satellite modem.

The inventions listed as Groups I, II and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is establishing sessions between a calling party and a proxy via a satellite link and a proxy and a called party using different distinct protocols as claimed therein; the special technical feature of the Group II invention is converting at least some of packets received from a near-end telephone from its protocol to another protocol including reducing the header sizes of at least some of the packets as claimed therein; and the special technical feature of the Group III invention is decoding packets received from a satellite modem and encoded according to a second communication protocol, by converting at least some of the packets into a first communication protocol as claimed therein.

Since none of the special technical features of the Group I, II and III inventions is found in more than one of the inventions, unity of invention is lacking.