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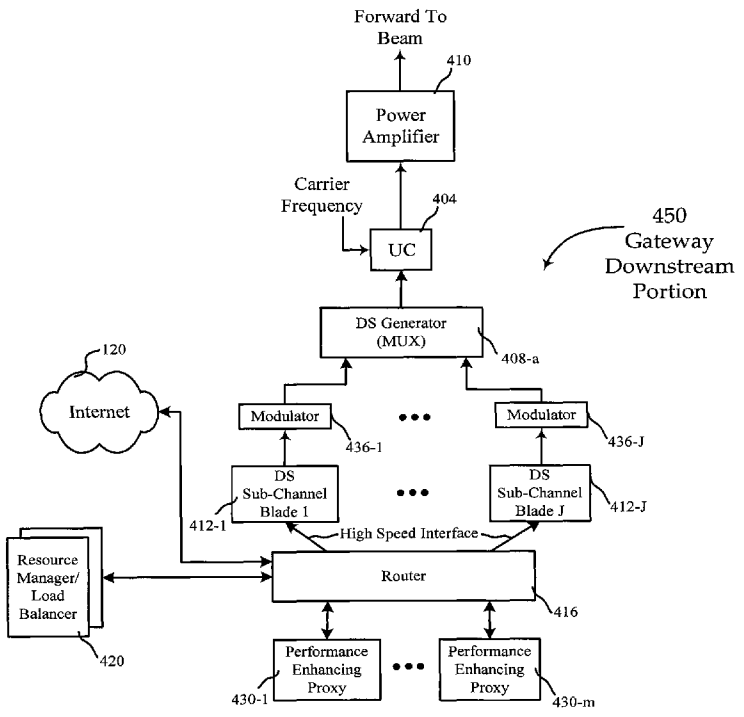
(54) Title: DYNAMIC FEEDBACK FOR OUTBOUND LINK RATE ADJUSTMENT IN MULTI-RATE DOWNSTREAM



(57) Abstract: Systems and methods for regulating the throughput of a channel between a gateway and one or more subscriber terminals are disclosed. Various embodiments of the invention provide for monitoring link utilization between a gateway and a subscriber terminal at, for example, the physical layer of the OSI model. Based in part on the link utilization the link throughput may be throttled at a layer higher than, for example, the transport layer. Regulating may occur by advertising a decreased TCP window size or intelligently dropping packets. In another embodiment, a subscriber terminal may estimate the signal to noise ratio of a forward link channel and communicate this SNR to the gateway. The gateway may adjust the modulation and/or coding of the signal in response to the SNR. The gateway may also throttle deliver of packets in response to changes these changes in the modulation and/or coding of the signal.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H04L

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, 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	AL-ASADY H A ET AL: "High-Speed Satellite Mobile Communications: Technologies and Challenges" PROCEEDINGS OF THE IEEE, IEEE. NEW YORK, US, vol. 92, no. 2, 1 February 2004 (2004-02-01), pages 312-339, XP011107747 ISSN: 0018-9219 figures 7,18,19 page 332, left-hand column, line 13 - line 35 page 333, left-hand column, line 21 - line 24 page 333, left-hand column, line 37 - right-hand column, line 21 page 334, right-hand column, line 15 - line 29 ----- -/--	1-22

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Tyszka, Krzysztof

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

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