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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, RO, RS, RU, 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.

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- 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))

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(54) Title: USING HYPERTEXT TRANSFER PROTOCOL AS A TRANSPORT FOR BI-DIRECTIONAL DATA STREAMS

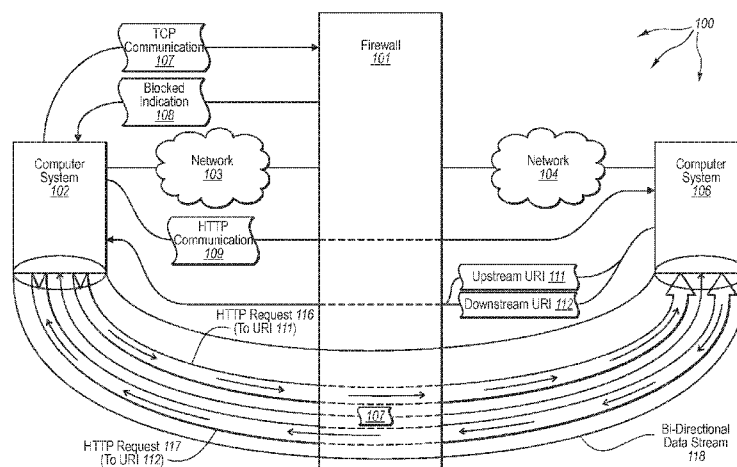


FIG. 1

(57) Abstract: The present invention extends to methods, systems, and computer program products for using HyperText Transfer Protocol communication as a transport for bi-directional data streams. Embodiments of the invention facilitate passing otherwise blocked TCP communication through a firewall. Embodiments of the invention can be used to pass legitimate TCP communication through a firewall even though a firewall is configured to block the legitimate TCP communication.

A. CLASSIFICATION OF SUBJECT MATTER***H04L 12/22(2006.01)i, H04L 29/06(2006.01)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)

H04L 12/22; G06F 15/16; G06F 11/30; G06F 15/173; H04L 9/32

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:http, tcp, firewall.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005-0125532 A1 (GUR KIMCHI) 09 June 2005	9-11
A	See abstract; figures 4, 6; paragraphs [0028]-[0030],[0034],[0037],[0042]-[0044]; claims 1,2,4,8,10,11,18.	1-8,12-15
A	US 2006-0236387 A1 (KEITH W. BALLINGER et al.) 19 October 2006	1-15
	See abstract; paragraphs [0007]-[0015]; claims 1,6,7,9,11.	
A	US 2002-0157021 A1 (STEPHEN SORKIN et al.) 24 October 2002	1,9,15
	See paragraphs [0060],[0122]-[0124].	



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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