

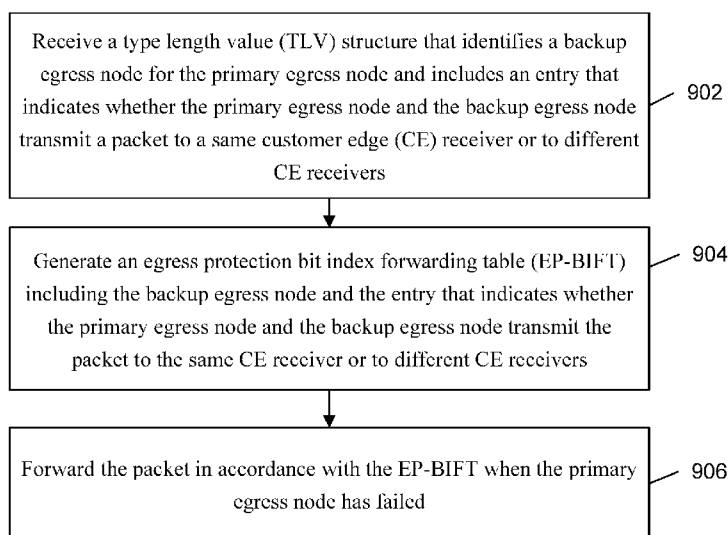


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ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO,
NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,
SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN,
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(54) Title: BIT INDEX EXPLICIT REPLICATION EGRESS PROTECTION

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FIG. 9



(57) Abstract: A method implemented by a network node in a Bit Index Explicit Replication (BIER) domain is used to provide fast egress protection. The method includes receiving a type length value (TLV) structure that identifies a backup egress node for a destination network node and includes an entry that indicates whether a primary egress node and the backup egress node transmit a packet to a same customer edge (CE) or to different customer edges (CEs), generating an egress protection bit index forwarding table (EP-BIFT) including the backup egress node and the entry that indicates whether the primary egress node and the backup egress node transmit the packet to the same CE or to different CE, and forwarding the packet in accordance with the EP-BIFT when the primary egress node has failed.



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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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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 practicable, search terms used) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2015/138961 A1 (WIJNANDS IJSBRAND [BE] ET AL) 21 May 2015 (2015-05-21) paragraph [0055] - paragraph [0062] ----- -/--	1-29
☒ Further documents are listed in the continuation of Box C. ☒ See patent family 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 application or patent 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 26 January 2022		Date of mailing of the international search report 04/02/2022
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016		Authorized officer Perrier, Samuel

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ZHANG C WANG ZTE CORPORATION Z: "Automatic Assignment of BIER BFR-ids in OSPF; draft-zhang-bier-bfrid-assignment-00.txt", AUTOMATIC ASSIGNMENT OF BIER BFR-IDS IN OSPF; DRAFT-ZHANG-BIER-BFRID-ASSIGNMENT-00.TXT, INTERNET ENGINEERING TASK FORCE, IETF; STANDARDWORKINGDRAFT, INTERNET SOCIETY (ISOC) 4, RUE DES FALAISES CH- 1205 GENEVA, SWITZERLAND, 22 December 2015 (2015-12-22), pages 1-19, XP015110403, [retrieved on 2015-12-22] page 3, line 2 - line 14 page 6, line 2 - line 18 page 13, line 2 - line 13 -----	1-29

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2015138961 A1	21-05-2015	US 2015138961 A1	21-05-2015
		US 2018278470 A1	27-09-2018
