

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 August 2005 (25.08.2005)

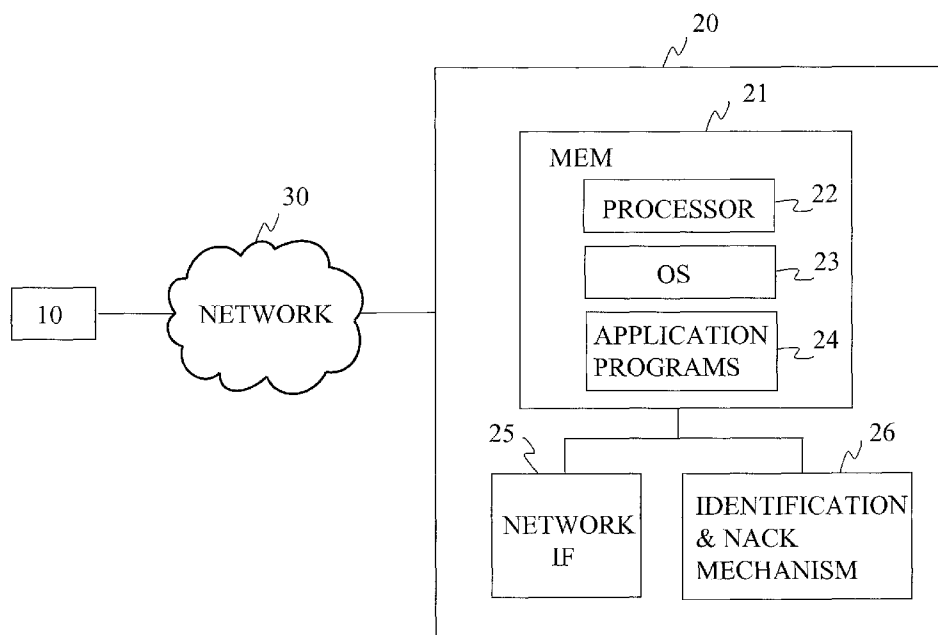
PCT

(10) International Publication Number
WO 2005/078982 A1

- (51) International Patent Classification⁷: **H04L 1/16**, 1/18, 12/18, H04H 1/00
- (74) Agent: **FORSSÉN & SALOMAA OY**; Eerikinkatu 2, FI-00100 HELSINKI (FI).
- (21) International Application Number:
PCT/FI2005/050029
- (22) International Filing Date: 11 February 2005 (11.02.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/778,926 13 February 2004 (13.02.2004) US
- (71) Applicant (for all designated States except US): **NOKIA CORPORATION** [FI/FI]; Keilalahdentie 4, FI-02150 ESPOO (FI).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WALSH, Rod** [GB/FI]; Kelkkakatu 4 B 12, FI-33580 TAMPERE (FI). **MEHTA, Harsh** [IN/FI]; Hämeenpuisto 18 B 34, FI-33210 TAMPERE (FI). **CURCIO, Igor** [IT/FI]; Hatanpään valtatie 12 C 57, FI-33100 TAMPERE (FI). **PAILA, Toni** [FI/FI]; Luoteispolku 10, FI-10160 DEGERBY (FI).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: IDENTIFICATION AND RE-TRANSMISSION OF MISSING PARTS



(57) Abstract: The invention relates to a method for file delivery in a system capable of one-to-many transmission, the method comprising transferring one or more data blocks from a sender to at least one receiver, identifying a data block expected to be received but not received at all or incorrectly received at the receiver, and taking action to re-transmit said data block. In the method, said identification is performed on the basis of a block number, an encoding identifier and certain other identification information.

WO 2005/078982 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.