

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
31 July 2003 (31.07.2003)

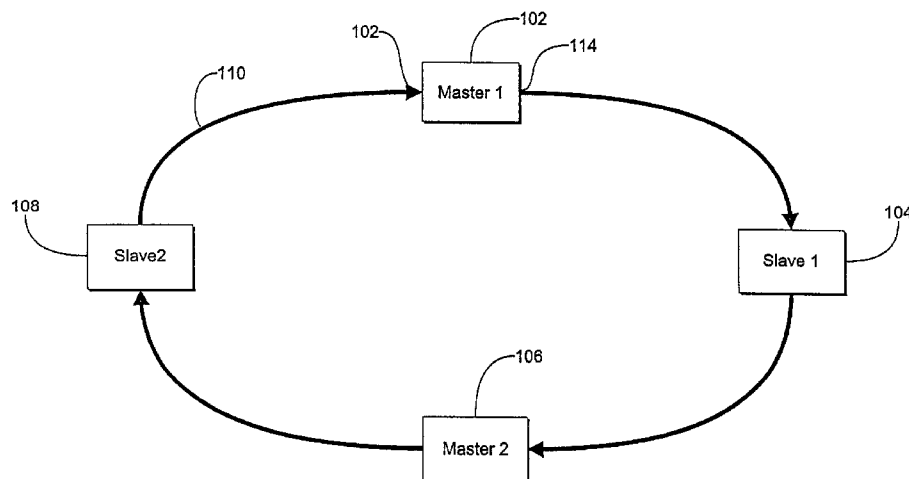
PCT

(10) International Publication Number
WO 03/063424 A3

- (51) International Patent Classification⁷: **H04L 12/433** (74) Agent: **MOSS, Robert, Douglas**; IBM United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester, Hampshire SO21 2JN (GB).
- (21) International Application Number: PCT/GB03/00127
- (22) International Filing Date: 15 January 2003 (15.01.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/055,335 23 January 2002 (23.01.2002) US
- (71) Applicant: **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, NY 10504 (US).
- (71) Applicant (for MG only): **IBM UNITED KINGDOM LIMITED** [GB/GB]; PO Box 41, North Harbour, Portsmouth, Hampshire PO6 3AU (GB).
- (72) Inventors: **POSPESEL, Kirk**; 69 Stony Brook Road, Palenville, NY 12463 (US). **DUBOIS, Thomas**; 26 Millrock Road, New Paltz, NY 12561-1226 (US). **LIBERTY, Dean**; 52 Cathedral Circle, Nashua, NH 03063 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (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: METHOD AND SYSTEM FOR SIMULTANEOUS MANAGEMENT OF MULTIPLE TOKENS ON A COMMUNICATION RING



100

(57) Abstract: A method, an apparatus and computer readable medium for simultaneous communication over a bus in a master/slave agent network topology. Each communication agent on the network is either a master agent (102, 106) or slave agent (104, 108) with an input (112) and an output (114). In one embodiment, the input (112) and the output (114) are latches. The method permits the number of tokens on the ring (110) to be equal to up to one less than the total number of agents on the ring (110).



WO 03/063424 A3



(88) Date of publication of the international search report:
12 September 2003

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.