(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 24 October 2002 (24.10.2002)

PCT

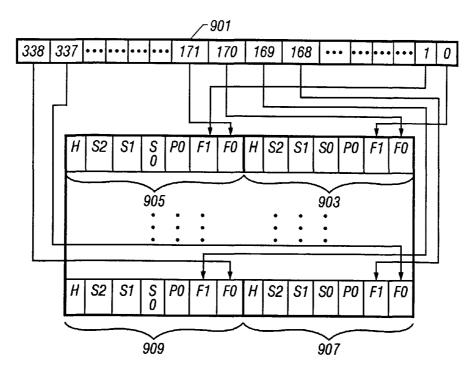
(10) International Publication Number WO 02/084924 A3

- (51) International Patent Classification⁷: H04J 3/06
- (21) International Application Number: PCT/US02/11451
- **(22) International Filing Date:** 12 April 2002 (12.04.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 09/835,979 16 April 2001 (16.04.2001) US
- (71) Applicant: REDBACK NETWORKS, INC. [US/US]; 250 Holger Way, San Jose, CA 95134 (US).
- (72) Inventors: MCCLARY, Michael; 36347 Christine
 Street, Newark, CA 94560 (US). NARAHARI, Sharath;
 925 Roselma Place, Pleasanton, CA 94566 (US). TAO,
 Andrew; 429 Forest Avenue, Palo Alto, CA 94301 (US).

- (74) Agents: MALLIE, Michael, J. et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 7th Floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (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, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, 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, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: A METHOD AND APPARATUS FOR SIMULTANEOUSLY SYNC HUNTING SIGNALS



(57) Abstract: A method and apparatus for simultaneously sync hunting signals is described. In one embodiment of the invention, a computer implemented method comprises initializing a first and second subset of a set of per-alignment state machines (903, 905, 907, 909), receiving a first and second signal, and simultaneously sync hunting the first signal with the first subset of the set of per-alignment state machines (903, 905, 907, 909) and the second signal with the second subset of the set of per-alignment state machines (903, 905, 907, 909).



02/084924 A3

WO 02/084924 A3



Published:

with international search report

(88) Date of publication of the international search report: 8 May 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.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/11451

		101/0302/1143	Τ .
A. CLASSIFICATION OF SUBJECT MATTER			
IPC(7) : H04J 3/06 US CL : 370/510, 535, 536, 470, 503, 506			
US CL: 370/510, 535, 536, 470, 503, 506 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)			
U.S.: 370/510, 535, 536, 470, 503, 506, 465, 466, 412			
Decompositation recorded other than minimum decompositation to the autout that make decomposite in the last of the first of the substitute			
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)			
EAST			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
Y	US 5,161,152 A (CZERWIEC et al) 03 November	1992, abstract; Figure 1; and col. 2,	1-31 and 35-47
	lines 54-61.		
Y	US 6,185,424 B1 (PON et al) 06 February 2001, col. 6, lines 29-31; col. 9, lines 24-26;		
A	col. 10, lines 7-11. US 5,500,853 A (ENGDAHL et al) 19 March 1996, abstract, Figure 4. 1-47		
л.	03 3,500,633 A (ENODAME et al) 19 Match 1990, abstract, Figure 4.		
Α	US 5,526,359 A (READ et al) 11 June 1996, abstract, Figure 1.		1-47
A	US 6,160,806 A (CANTWELL et al) 12 December 2000, abstract, Figure 1.		1-47
	11 OB 0,100,000 11 (OM 11 HBBB of all) 1B Boomboil Bood, abstract, 11gate 1.		
Further documents are listed in the continuation of Box C. See patent family annex.			
* Special categories of cited documents: "T" later document published after the international filing date or priority			
"A" document defining the general state of the art which is not considered to be date and not in conflict with the application but cited to understand the principle or theory underlying the invention			
of particu	lar relevance	"X" document of particular relevance; the	a claimed invention gannot be
"E" earlier ap	plication or patent published on or after the international filing date	considered novel or cannot be considered when the document is taken alone	
	which may throw doubts on priority claim(s) or which is cited to		
establish t specified)	the publication date of another citation or other special reason (as	"Y" document of particular relevance; the considered to involve an inventive ste	
combined with one or more other such documents, such combinati			ch documents, such combination
"O" document referring to an oral disclosure, use, exhibition or other means		being obvious to a person skilled in t	ne art
"P" document published prior to the international filing date but later than the "&" priority date claimed		"&" document member of the same patent	t family
Date of the actual completion of the international search Date of mailing of the international search report			arch report
Daw of the g	ctual completion of the international scaren	16 JAN 29	S Teport
12 August 2002 (12.08.2002)		11.2	147
	ailing address of the ISA/US	Authorized officer	
Commissioner of Patents and Trademarks Box PCT		Brian Nguyen	
Washington, D.C. 20231 Facsimile No. (703)305-3230 Telephone No. (703) 305-5133			
T CONTINUE INC	· (100)000-0000		