

300003496-0
00R: 21/09/00

BCS

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G11C		A2	(11) International Publication Number: WO 99/43002
			(43) International Publication Date: 26 August 1999 (26.08.99)
(21) International Application Number: PCT/US99/03955 (22) International Filing Date: 24 February 1999 (24.02.99) (30) Priority Data: 60/075,797 24 February 1998 (24.02.98) US (71) Applicant: SEAGATE TECHNOLOGY, INC. [US/US]; 920 Disc Drive, B15-7, Scotts Valley, CA 95066 (US). (72) Inventors: MILLER, Michael, H.; 6850 Park View Lane, Eden Prairie, MN 55346 (US). WESTBY, Judy, Lynn; 7906 W. 111th Street, Bloomington, MN 55438 (US). (74) Agents: VIKSNINS, Ann, S.; Schwegman, Lundberg, Woess- ner & Kluth, P.O. Box 2938, Minneapolis, MN 55402 (US) et al.		(81) Designated States: CN, DE, GB, JP, KR, SG. Published Without international search report and to be republished upon receipt of that report.	

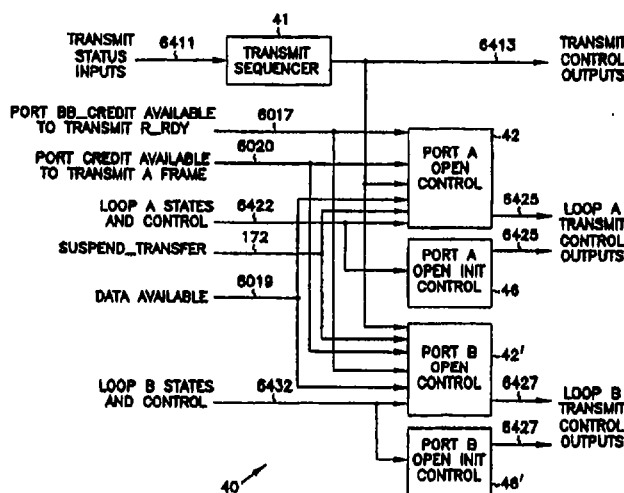


162162



G00002

(54) Title: PRESERVING LOOP FAIRNESS WITH DYNAMIC HALF-DUPLEX



(57) Abstract

A method and apparatus for preserving loop fairness. Some embodiments include a dynamic half-duplex feature. One aspect includes a communications channel system and method for preserving loop fairness that includes a first channel node having one or more ports, each port supporting and attached to a fibre-channel arbitrated-loop serial communications channel. One of the ports will arbitrate for control of that port's attached channel, wherein control of the channel loop, once arbitration is won, a fairness-preserving apparatus causes control of the communications channel to be released based at least in part on whether a predetermined amount of use has occurred between the first port and the communications channel. In some embodiments, the predetermined amount of use includes a transfer of a first predetermined amount of data. In some embodiments, release of control of the channel is inhibited if less than a second predetermined amount of data remains to be transferred.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						