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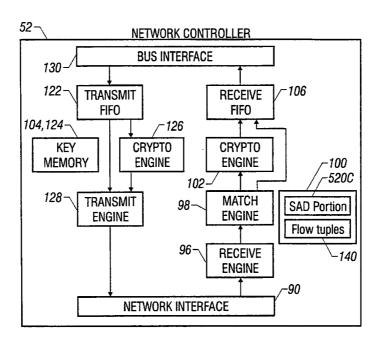
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[Continued on next page]

(54) Title: PROTECTION OF COMMUNICATIONS



(57) Abstract: A controller (52) for controlling communications between a system (50) and a transport medium (47) includes a receiving circuit (96) to receive data and associated security control information. A first cryptographic engine (102) cryptographically processes the data received from the transport medium based on the security control information. The controller (52) also includes a second cryptographic engine (126) to process data generated in the system (50) according to a security protocol before transmission to the transport medium (47).

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	o International Patent Classification (IPC) or to both national class	sification and IPC	
	SEARCHED ocumentation searched (classification system followed by classifi	ication symbols)	
IPC 7			
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EPO-In	ternal, WPI Data, PAJ, INSPEC, IBM	1-TDB	
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the	e relevant passages	Relevant to claim No.
E	US 6 081 895 A (RODEN CHRISTOPH ET AL) 27 June 2000 (2000-06-27		1,2,5,8, 9,11, 13-20
	abstract column 2, line 21 - line 31 column 4, line 39 - line 51 column 6, line 32 - line 45		
Х	EP 0 876 026 A (MOTOROLA INC) 4 November 1998 (1998-11-04)		1,2,5,8, 9,11, 13-20
	abstract page 3, column 3, line 25 - lir page 3, column 4, line 41 - lir page 4, column 6, line 54 -page 8, line 8		
		Y Patent family members are listed	in apply
LJ Fun	ther documents are listed in the continuation of box C.	Patent family members are listed	m amex.
Special categories of cited documents: A' document defining the general state of the art which is not considered to be of particular relevance		*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	
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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 6081895	Α	27-06-2000	NONE	
EP 0876026	Α	04-11-1998	US 6101255 A JP 10320191 A TW 386202 B	08-08-2000 04-12-1998 01-04-2000

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