

Title (en)
RAID CONTROLLER SYSTEM AND METHOD WITH ATA EMULATION HOST INTERFACE

Title (de)
RAID-CONTROLLER-SYSTEM UND -VERFAHREN MIT ATA-EMULIERENDER HOSTSCHNITTSTELLE

Title (fr)
SYSTEME ET PROCEDE DE COMMANDE RAID AVEC INTERFACE HOTE A EMULATION ATA

Publication
EP 1236106 A4 20021030 (EN)

Application
EP 00966864 A 20000921

Priority
• US 0026343 W 20000921
• US 15600199 P 19990922

Abstract (en)
[origin: WO122221A1] A RAID storage device controller (70) provides a host interface (56) for interfacing the controller to a host system bus. The host interface is isolated from the attached storage devices, for example IDE disk drives, so that the actual attached drives are not limited in number or interface protocol. Various device ports can be implemented, and various RAID strategies, e.g. level 3 and level 5, can be used. In all the cases, the host interface provides a standard, uniform interface to the host, namely an ATA interface (82, 84 and 86), and preferably a dual channel ATA interface. The host interface emulates the ATA single or dual channel interface and emulates one or two attached IDE devices per channel, regardless of the actual number of devices physically connected to the controller. Thus, for example, five or seven IDE drives can be deployed in RAID level 5 protocol without changing the standard BIOS in a PCI host machine. Thus the RAID controller is transparent relative to a standard dual channel ATA controller board.

IPC 1-7
G06F 9/455; **G06F 13/00**

IPC 8 full level
G06F 13/10 (2006.01); **G06F 3/06** (2006.01)

CPC (source: EP KR)
G06F 3/0613 (2013.01 - EP); **G06F 3/0614** (2013.01 - EP); **G06F 3/0664** (2013.01 - EP); **G06F 3/0689** (2013.01 - EP); **G06F 13/00** (2013.01 - KR)

Citation (search report)
• [A] US 5586248 A 19961217 - ALEXANDER DENNIS J [US], et al
• [A] US 5483641 A 19960109 - JONES CRAIG S [US], et al
• [X] SVEN SCHULZ: "Flotter Paarlauf", C'T MAGAZIN FÜR COMPUTER TECHNIK, June 1998 (1998-06-01), Hannover, Germany, pages 116, XP002216756
• [A] "A Promising Future: Setting the Trends in IDE", 29 April 1999, PROMISE TECHNOLOGY, XP002216757 & WEB.ARCHIVE
• See references of WO 0122221A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0122221 A1 20010329; AU 7714700 A 20010424; CA 2385492 A1 20010329; CA 2385492 C 20050816; CN 1222876 C 20051012; CN 1391672 A 20030115; EP 1236106 A1 20020904; EP 1236106 A4 20021030; HK 1050935 A1 20030711; JP 2003510683 A 20030318; KR 100441189 B1 20040721; KR 20020048414 A 20020622; TW 476030 B 20020211

DOCDB simple family (application)
US 0026343 W 20000921; AU 7714700 A 20000921; CA 2385492 A 20000921; CN 00815961 A 20000921; EP 00966864 A 20000921; HK 03101123 A 20030217; JP 2001525522 A 20000921; KR 20027003752 A 20020321; TW 89119646 A 20000922