

AbstractDisk Drives and Methods for Cleaning Disk Drives

5 A disk drive system for a removable hard disk includes an ultrasonic cleaning
apparatus. An ultrasonic radiator is attached to the inner surface of the drive
case and driven electronically to generate ultrasonic waves which are
transmitted through the disk chamber to effect cleaning. The waves may be
projected towards the cartridge insertion door, to form a repelling/baffling
ultrasonic flow which prevents external particles from entering the drive during
10 cartridge insertion operation. The ultrasonic waves may also be projected
towards an inserted cartridge and/or its head access window and/or the disk
and/or the slider. In any case, the ultrasonic beam impinges upon the targeted
surface and loosens debris/dust there.

[Fig. 6]