

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 December 2000 (28.12.2000)

PCT

(10) International Publication Number
WO 00/79538 A1

(51) International Patent Classification⁷: G11B 27/36,
5/596, 5/55, 20/10, 20/18, 19/04 // H04N 5/85, G11B
5/012

HIGLEY, Brian, John; 2205 23rd Avenue, Longmont,
CO 80501 (US).

(21) International Application Number: PCT/US00/17315

(74) Agents: BRUESS, Steven, C.; Merchant & Gould P.C.,
P.O. Box 2903, Minneapolis, MN 55402-0903 et al. (US).

(22) International Filing Date: 23 June 2000 (23.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/140,861 24 June 1999 (24.06.1999) US

(81) Designated States (*national*): CN, DE, DE (utility model),
GB, JP, KR, KR (utility model), SG.

(71) Applicant: SEAGATE TECHNOLOGY LLC [US/US];
920 Disc Drive, Scotts Valley, CA 95066 (US).

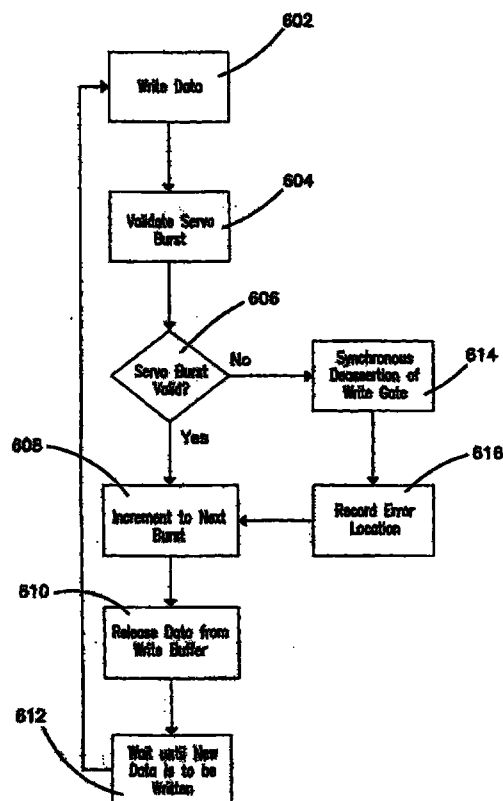
Published:

- With international search report.
- Before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments.

(72) Inventors: HAINES, Jonathan, Williams; 2285 Au-
turnn Ridge Boulevard, Lafayette, CO 80026-8834 (US).

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: AUDIO-VISUAL DISK DRIVE OPTIMIZED FOR RESPONSE TO AN OFF-COURSE HEAD DURING A WRITE
COMMAND



(57) Abstract: Herein is described a method and apparatus for optimizing a disc drive for audio-visual data storage and retrieval by responding to a certain write-time error in a manner that preserves data flow. In response to a write-time error in which information obtained from a servo burst indicates that the disc drive's head was either off course or anticipated to go off course, the disc drive responds by ceasing to write to the disc in synchronization with the end of writing a sector, so that a sector is no left half-written. The disc drive then transfers the sector numbers of the sectors which were improperly written or unwritten to the host. The disc drive attempts to continue writing to the disc in subsequent sectors, as soon as servo sectors once again indicate that the head is sufficiently re-centered on the track. Further, if the servo data indicates that the head may not have been well-centered between a current and previous servo burst, the sectors between those servo bursts will also be indicated to the host.

WO 00/79538 A1