CORRECTED VERSION*

PCT

97025-43-1

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

RTMP's copy

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G11B 5/60

A1

(11) International Publication Number: WO 96/19801

(43) International Publication Date: 27 June 1996 (27.06.96)

(21) International Application Number: PCT/US95/16272

(22) International Filing Date: 18 December 1995 (18.12.95)

(30) Priority Data:
08/358,432 20 December 1994 (20.12.94) US

(71) Applicant: CONNER PERIPHERALS, INC. [US/US]; 3081 Zanker Road, San Jose, CA 95134-2128 (US).

(72) Inventors: CHA, Ellis, Taeho; 1520 Vista Club Cir. #202, Santa Clara, CA 95054 (US). LEE, Jia-Kuen, Jerry; 1398 Sajak Avenue, San Jose, CA 95131 (US).

(74) Agents: CHAMPLIN, Judson, K. et al.; Westman, Champlin & Kelly, International Centre, Suite 1600, 900 Second Avenue South, Minneapolis, MN 55402 (US).

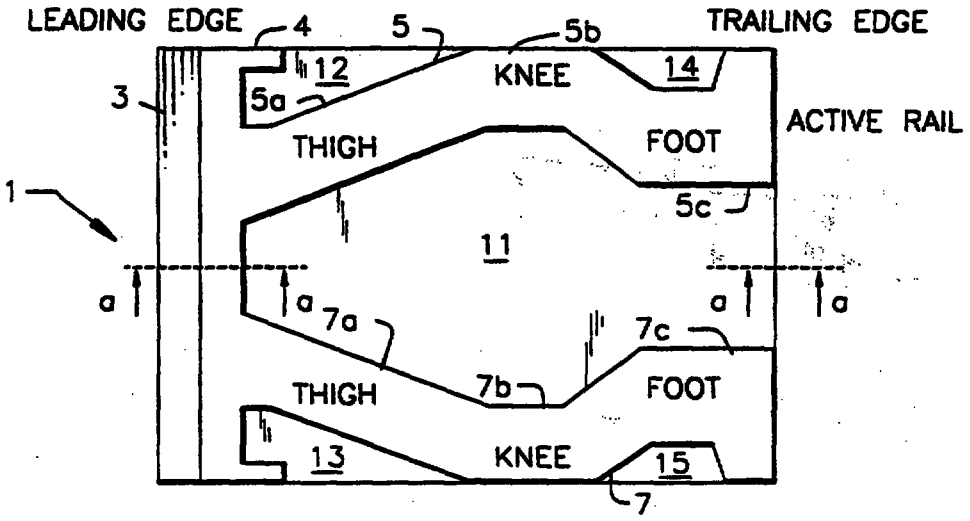
(81) Designated States: CA, CN, JP, KR, MX, SG, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

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

REPLACED SHEETS SG

☐ Description : paged ..... to paged .....
☑ Claim(s) : paged 12 to paged 16
☐ Drawing(s) : paged ..... to paged .....
☐ Abstract : paged ..... to paged .....

(54) Title: MAGNETIC HEAD SUB-AMBIENT AIR PRESSURE SLIDER FOR A DISK DRIVE DEVICE OR THE LIKE



(57) Abstract

A sub-ambient pressure, air bearing slider is disclosed for positioning a magnetic read/write head proximately to a rotating disk. The slider includes first and second rails extending along the side of the slider facing the rotating disk from a leading edge of the slider to a trailing edge of the slider. Each rail has a thigh region extending at an angle from the leading edge to a lateral side of the slider, a foot region extending at an angle from a lateral side of the slider toward the trailing edge of the slider, and a knee region at a lateral side of the slider coupled between the foot and thigh regions. Recesses are provided to shape the first and second rails. A central recess provides a volume for sub-ambient pressure. One or more tails can be placed within the central region to prevent the shifting of pressure completely to one side of the slider. The design of the first and second rails leads to a more uniform flying height for the slider and magnetic head over all tracks of the disk.

* (Referred to in PCT Gazette No. 41/1996, Section II)