

Title (en)

PLANAR VACUUM SEAL FOR ISOLATING AN AIR BEARING.

Title (de)

FLACHE LUFTLEERE DICHTUNG ZUR ISOLIERUNG EINES LUFTKISSENS.

Title (fr)

JOINT D'ETANCHEITE PLAT SOUS VIDE POUR L'ISOLATION D'UN PALIER PNEUMATIQUE.

Publication

EP 0067987 A4 19830406 (EN)

Application

EP 81900255 A 19801223

Priority

US 10720779 A 19791226

Abstract (en)

[origin: WO8202235A1] A graded planar seal is provided between opposing planar surfaces (62, 64) for isolating an air bearing in a vacuum environment (16). The air bearing (22, 24, 26, 62, 64) supports a structure (20) such as a semiconductor mask or wafer and functions in a vacuum environment without severely degrading the quality of the vacuum. The air bearing is isolated from the vacuum by the use of the graded planar seal which establishes a pressure gradient from the level of the air which supports the air bearing (22, 24, 26, 62, 64) to the level of the vacuum environment (16). The gradient is established across the seal by evacuating gas through successive orifices (42, 44, 46, 52) in opposing planar members (12, 14).

IPC 1-7

F16J 15/40

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- US 4118042 A 19781003 - BOOTH REX
- FR 1152577 A 19580220 - THOMSON HOUSTON COMP FRANCAISE

Cited by

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