

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 May 2003 (15.05.2003)

PCT

(10) International Publication Number
WO 03/041165 A3

(51) International Patent Classification⁷: **H01L 23/373**,
B22F 3/10, 3/11

(21) International Application Number: PCT/US01/32544

(22) International Filing Date: 18 October 2001 (18.10.2001)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG).

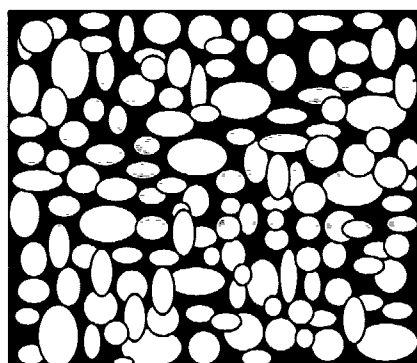
Published:

— with international search report

(88) Date of publication of the international search report:
24 July 2003

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

(54) Title: ELECTRICALLY CONDUCTIVE THERMAL INTERFACE



(57) Abstract: A porous, flexible, resilient heat transfer material which comprises network of metal flakes. Such heat transfer materials are preferably produced by first forming a conductive paste comprising a volatile organic solvent and conductive metal flakes. The conductive paste is heated to a temperature below the melting point of the metal flakes, thereby evaporating the solvent and sintering the flakes only at their edges. The edges of the flakes are fused to the edges of adjacent flakes such that open pores are defined between at least some of the adjacent flakes, thereby forming a network of metal flakes. This network structure allows the heat transfer material to have a low storage modulus of less than about 10 Gpa, while having good electrical resistance properties.



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