

Title (en)
THIN FILM HEATING ELEMENT

Title (de)
DÜNNSCHICHT-HEIZELEMENT.

Title (fr)
ELEMENT CHAUFFANT A FILM MINCE

Publication
EP 1120014 A4 20040616 (EN)

Application
EP 99947118 A 19990917

Priority
• AU 9900791 W 19990917
• AU PP599598 A 19980918

Abstract (en)
[origin: WO0018189A1] A thin film heating element capable of withstanding power densities of 10-20 watts cm⁻² and/or temperatures up to 650 DEG C is disclosed. The preferred form of the heating element includes a layer of tin oxide doped with relatively large quantities of cerium and lanthanum deposited on an insulating substrate by pyrolysis of a solution of monobutyl tin trichloride containing the above rare earth elements. The solution and subsequent oxide layer further include donor and acceptor elements such as antimony and zinc to enhance the conductivity of the heating element.

IPC 1-7
H05B 3/14; **H05B 3/12**; **H05B 6/14**

IPC 8 full level
H05B 3/12 (2006.01); **H05B 3/14** (2006.01); **H05B 3/20** (2006.01)

CPC (source: EP KR)
H05B 3/12 (2013.01 - EP); **H05B 3/14** (2013.01 - KR); **H05B 3/141** (2013.01 - EP)

Citation (search report)
• [Y] US 4889974 A 19891226 - AUDING HANS [DE], et al
• [A] EP 0341708 A2 19891115 - FUJI XEROX CO LTD [JP]
• [Y] DATABASE WPI Section Ch Week 198240, Derwent World Patents Index; Class L03, AN 1982-85260E, XP002277618
• See references of WO 0018189A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0018189 A1 20000330; AU PP599598 A0 19981008; BR 9913812 A 20010814; CA 2344486 A1 20000330; CN 1146301 C 20040414; CN 1317223 A 20011010; EP 1120014 A1 20010801; EP 1120014 A4 20040616; ID 29148 A 20010802; JP 2002525829 A 20020813; KR 20010079859 A 20010822; NZ 510655 A 20030530

DOCDB simple family (application)
AU 9900791 W 19990917; AU PP599598 A 19980918; BR 9913812 A 19990917; CA 2344486 A 19990917; CN 99810772 A 19990917; EP 99947118 A 19990917; ID 20010871 A 19990917; JP 2000571716 A 19990917; KR 20017003505 A 20010319; NZ 51065599 A 19990917