

Title (en)  
Metallic material or film having fluorinated surface layer, and fluorination process

Title (de)  
Metallisches Material oder Film mit fluorierter Oberfläche und Fluorierungsverfahren

Title (fr)  
Matériau métallique ou couche mince ayant une surface fluorée et procédé de fluoration

Publication  
**EP 0902101 A1 19990317 (EN)**

Application  
**EP 98117280 A 19980911**

Priority  
JP 24823197 A 19970912

Abstract (en)  
The known fluorinated layer has usually a thickness of from 1000 to 3000 angstroms. After the forced oxidation of metal, the forcibly oxidized surface is fluorinated. As a result of the preceding forced oxidation, a 1 µm or more thick fluorinated layer is formed on the surface of the metal. <IMAGE>

IPC 1-7  
**C23C 8/34**

IPC 8 full level  
**C23C 8/08** (2006.01); **C23C 8/10** (2006.01); **C23C 8/12** (2006.01); **C23C 8/16** (2006.01); **C23C 8/34** (2006.01); **C23C 8/42** (2006.01)

CPC (source: EP KR)  
**C23C 8/08** (2013.01 - KR); **C23C 8/34** (2013.01 - EP)

Citation (search report)

- [X] EP 0460701 A1 19911211 - APPLIED MATERIALS INC [US]
- [X] EP 0460700 A1 19911211 - APPLIED MATERIALS INC [US]
- [X] US 4111762 A 19780905 - WADE JACKIE F, et al
- [A] EP 0702098 A1 19960320 - APPLIED MATERIALS INC [US]
- [A] EP 0352061 A2 19900124 - HASHIMOTO CHEMICAL IND [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 544 (C - 1004) 13 November 1992 (1992-11-13)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 328 (C - 1215) 22 June 1994 (1994-06-22)

Cited by  
CN101835991A; EP2211061A4; US6955801B2; WO03002454A3; WO03036216A1

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