

Title (en)

SEMICONDUCTOR DEVICE WITH A LAYER OF PRECIOUS METAL AND A PROCESS FOR PRODUCTION OF SAME

Title (de)

HALBLEITERANORDNUNG MIT EINER SCHICHT AUS EINEM EDELMETALL UND VERFAHREN ZUM HERSTELLEN DERSELBEN

Title (fr)

DISPOSITIF A SEMICONDUCTEUR POURVU D'UNE COUCHE DE METAL PRECIEUX, ET SON PROCEDE DE PRODUCTION

Publication

EP 0931334 A1 19990728 (DE)

Application

EP 97943753 A 19970911

Priority

- DE 9702036 W 19970911
- DE 19640240 A 19960930

Abstract (en)

[origin: DE19640240A1] This invention concerns a semiconductor device in which a silicon nitride layer (4) is used as a bonding agent between a precious metal layer, in particular a platinum layer (6), and a substrate. The silicon nitride layer itself (4) can serve as the substrate. The process according to the invention is characterized by the fact that, to increase the bonding property of the precious metal layer (6) to the silicon nitride layer, a substrate bias voltage of approximately 250 V is applied between the silicon nitride layer (4) and an anode (5).

IPC 1-7

H01L 21/3205

IPC 8 full level

C23C 14/34 (2006.01); **C23C 14/02** (2006.01); **C23C 14/18** (2006.01); **H01L 21/285** (2006.01); **H01L 21/316** (2006.01); **H01L 21/318** (2006.01); **H01L 21/3205** (2006.01); **H01L 21/822** (2006.01); **H01L 21/8242** (2006.01); **H01L 27/04** (2006.01); **H01L 27/10** (2006.01); **H01L 27/108** (2006.01)

CPC (source: EP KR)

C23C 14/024 (2013.01 - EP); **C23C 14/185** (2013.01 - EP); **H01L 21/3205** (2013.01 - KR); **H01L 21/32051** (2013.01 - EP)

Citation (search report)

See references of WO 9814991A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

DE 19640240 A1 19980402; CN 1226999 A 19990825; EP 0931334 A1 19990728; JP 2001501374 A 20010130; KR 20000029581 A 20000525; TW 398027 B 20000711; WO 9814991 A1 19980409

DOCDB simple family (application)

DE 19640240 A 19960930; CN 97196961 A 19970911; DE 9702036 W 19970911; EP 97943753 A 19970911; JP 51611098 A 19970911; KR 19997000642 A 19990126; TW 86113182 A 19970911