

Title (en)

A SEMICONDUCTOR DEVICE HAVING A NICKEL/COBALT SILICIDE REGION FORMED IN A SILICON REGION

Title (de)

HALBLEITERBAUELEMENT MIT EINER IN EINER SILIZIUMREGION AUSGEBILDETEN NICKEL-COBALTSILIZID-REGION

Title (fr)

DISPOSITIF A SEMI-CONDUCTEUR COMPRENANT UNE ZONE DE SILICIURE DE NICKEL/COBALT FORMEE DANS UNE ZONE DE SILICIUM

Publication

EP 1668681 A1 20060614 (EN)

Application

EP 04784756 A 20040917

Priority

- US 2004031037 W 20040917
- DE 10345374 A 20030930
- US 85955204 A 20040602

Abstract (en)

[origin: WO2005034225A1] By forming a buried nickel silicide layer (260A) followed by a cobalt silicide layer (261A) in silicon containing regions, such as a gate electrode of a field effect transistor, the superior characteristics of both silicides may be combined so as to provide the potential for further device scaling without unduly compromising the sheet resistance and the contact resistance of scaled silicon circuit features.

IPC 1-7

H01L 21/285

IPC 8 full level

H01L 21/28 (2006.01); **H01L 21/285** (2006.01); **H01L 21/336** (2006.01)

CPC (source: EP KR)

H01L 21/24 (2013.01 - KR); **H01L 21/28052** (2013.01 - EP); **H01L 21/28518** (2013.01 - EP); **H01L 29/665** (2013.01 - EP)

Citation (search report)

See references of WO 2005034225A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

WO 2005034225 A1 20050414; EP 1668681 A1 20060614; JP 2007527111 A 20070920; KR 20060091308 A 20060818

DOCDB simple family (application)

US 2004031037 W 20040917; EP 04784756 A 20040917; JP 2006533961 A 20040917; KR 20067006181 A 20060329