Title (en)

METHOD FOR STRUCTURING METAL BY MEANS OF A CARBON MASK

Title (de

VERFAHREN ZUR METALLSTRUKTURIERUNG MITTELS KOHLENSTOFF-MASKE

Title (fr)

METHODE POUR STRUCTURER UN METAL A L'AIDE D'UNE MASQUE DE CARBONE

Publication

EP 1522094 A1 20050413 (DE)

Application

EP 03763579 A 20030626

Priority

- DE 0302125 W 20030626
- DE 10231533 A 20020711

Abstract (en)

[origin: WO2004008520A1] The invention relates to a method for structuring metal, in which at least one metal layer (2), e.g. made of aluminum, is deposited on an Si substrate (1) by means of a deposition method, whereupon an etching mask is produced on said metal layer (2) that is subsequently structured by means of etching, preferably plasma etching. The aim of the invention is to create a simplified method for structuring metal, which ensures sufficient passivation of the etched metal structures during the etching process by using simple means. Said aim is achieved by the fact that a hard mask layer is deposited on the previously deposited metal layer (2) that is to be structured, said hard mask layer being in the form of a carbon layer (3) on which a resist (5) is deposited. The carbon layer is structured by stripping once the resist has been structured so as to form a carbon mask. The metal layer is then etched with the carbon mask defining the structures thereof while passivating the side walls, whereupon the masks are stripped.

IPC 1-7

H01L 21/3213

IPC 8 full level

H01L 21/3213 (2006.01)

CPC (source: EP)

H01L 21/32139 (2013.01)

Citation (search report)

See references of WO 2004008520A1

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

WO 2004008520 A1 20040122: DE 10231533 A1 20040129; EP 1522094 A1 20050413; TW 200402804 A 20040216; TW 1223357 B 20041101

DOCDB simple family (application)

DE 0302125 W 20030626; DE 10231533 A 20020711; EP 03763579 A 20030626; TW 92118930 A 20030710