

Title (en)

METHOD OF MAKING A SEMICONDUCTOR DEVICE USING TREATED PHOTORESIST

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER HALBLEITERVORRICHTUNG UNTER VERWENDUNG EINES BEHANDELTEN FOTOLACKS

Title (fr)

PROCEDE DE FABRICATION D'UN DISPOSITIF SEMICONDUCTEUR AU MOYEN D'UNE PHOTORESINE TRAITEE

Publication

EP 1719162 B8 20160511 (EN)

Application

EP 05711379 A 20050112

Priority

- US 2005000961 W 20050112
- US 77900704 A 20040213

Abstract (en)

[origin: US2005181630A1] A semiconductor device is made by patterning a conductive layer for forming gates of transistors. The process for forming the gates has a step of patterning photoresist that overlies the conductive layer. The patterned photoresist is trimmed so that its width is reduced. Fluorine, preferably F₂, is applied to the trimmed photoresist to increase its hardness and its selectivity to the conductive layer. Using the trimmed and fluorinated photoresist as a mask, the conductive layer is etched to form conductive features useful as gates. Transistors are formed in which the conductive pillars are gates. Other halogens, especially chlorine, may be substituted for the fluorine.

IPC 8 full level

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CPC (source: EP KR US)

B82Y 40/00 (2013.01 - KR); **G03F 7/26** (2013.01 - KR); **H01L 21/0273** (2013.01 - EP KR US); **H01L 21/0338** (2013.01 - KR); **H01L 21/28123** (2013.01 - EP KR US); **H01L 21/32139** (2013.01 - EP KR US); **H01L 29/66477** (2013.01 - EP KR US); **H01L 29/78** (2013.01 - EP KR US); **H01L 21/0338** (2013.01 - EP US); **Y10S 438/945** (2013.01 - EP KR US); **Y10S 438/947** (2013.01 - EP KR US)

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