Title (en)

METHOD AND APPARATUS FOR MEGASONIC CLEANING OF PATTERNED SUBSTRATES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR MEGASCHALL-REINIGUNG VON GEMUSTERTEN SUBSTRATEN

Title (fr)

PROCEDE ET APPAREIL DE NETTOYAGE MEGASONIQUE DE SUBSTRATS A MOTIFS

Publication

EP 1599298 A4 20070502 (EN)

Application

EP 04708156 A 20040204

Priority

- US 2004003179 W 20040204
- US 37160303 A 20030220
- US 37794303 A 20030228

Abstract (en)

[origin: WO2004074931A2] A method for cleaning a semiconductor substrate is provided. The method initiates with generating acoustic energy oriented in a substantially perpendicular direction to a surface of a semiconductor substrate. Then, acoustic energy oriented in a substantially parallel direction to the surface of the semiconductor substrate is generated. Each orientation of the acoustic energy may be simultaneously generated or alternately generated. A system and an apparatus for cleaning a semiconductor substrate are also provided.

IPC 8 full level

H01L 21/00 (2006.01); **B08B 3/12** (2006.01)

CPC (source: EP KR)

B08B 3/12 (2013.01 - EP KR); **H01L 21/67057** (2013.01 - EP KR); B08B 2203/0288 (2013.01 - KR); Y10S 134/902 (2013.01 - KR)

Citation (search report)

- [X] US 6026832 A 20000222 - SATO NOBUAKI [JP], et al
- [A] US 6085764 A 20000711 - KOBAYASHI KANJI [JP], et al
- [A] US 6188162 B1 20010213 - VENNERBECK RICHARD B [US]
- See references of WO 2004074931A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004074931 A2 20040902; **WO 2004074931 A3 20050127**; EP 1599298 A2 20051130; EP 1599298 A4 20070502; JP 2006518550 A 20060810; JP 4733012 B2 20110727; KR 100952087 B1 20100413; KR 20050100405 A 20051018; TW 200425231 A 20041116; TW I290729 B 20071201

DOCDB simple family (application)

US 2004003179 W 20040204; EP 04708156 A 20040204; JP 2006503312 A 20040204; KR 20057015366 A 20040204; TW 93103559 A 20040213