

Title (en)

METHOD AND APPARATUS FOR DOPING A SOLID MATERIAL

Title (de)

GERAET UND VERFAHREN ZUM DATIEREN VON FESTSTOFFMATERIAL

Title (fr)

PROCEDE ET APPAREIL POUR DOPER UN MATERIAU SOLIDE

Publication

EP 0689722 A1 19960103 (EN)

Application

EP 93905317 A 19930308

Priority

EP 9300522 W 19930308

Abstract (en)

[origin: WO9420991A1] A doping method for a solid host material (2), preferably a film, using an electrochemical cell (1, 2, 5, 6) and the host material (2) as one of the electrodes, wherein the doping is confined to a selected region of the host material by using either a specially designed counterelectrode, for example a tip (1), or by covering the host material (2) by a layer with the exception of the selected region. The method is especially suitable for using oxygen as dopant and the preparation of oxide superconductors. By using control devices and (piezoelectric) transducers known from the scanning tunneling microscope, doped regions of submicron resolution can be produced.

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H01L 39/24; H01L 21/38; H01L 21/479

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 9420991A1

Cited by

EP1608844A4; US7650937B2; US8235106B2; US8522870B2

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