



(51) International Patent Classification:

H01L 21/324 (2006.01) *H01L 33/32* (2010.01)
H01L 21/20 (2006.01) *B01J 3/06* (2006.01)
H01L 33/00 (2010.01) *B01J 3/00* (2006.01)

(21) International Application Number:

PCT/EP2009/005694

(22) International Filing Date:

6 August 2009 (06.08.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

08290757.7 6 August 2008 (06.08.2008) EP
09290577.7 21 July 2009 (21.07.2009) EP

(71) Applicant (for all designated States except US): **S.O.I.**

TEC SILICON ON INSULATOR TECHNOLOGIES
[FR/FR]; Chemin des Franques, Parc Technologique des
Fontaines, F-38926 Bernin (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LETERTRE, Fab-**
rice [FR/FR]; 40 chemin des Buclos, F-38240 Meylan
(FR). **MAZURE, Carlos** [FR/FR]; 143 Chemin du Bas
Bernin, Résidence Cidex 64a, F-38190 Bernin (FR).
KRAMES, Michael, R. [US/US]; 431 University Av-
enue, Los Altos, CA 94022 (US). **MCLAURIN, Melvin,**

B. [US/US]; 171 Georgetown Court Mountain View, CA
94043 (US). **GARDNER, Nathan, F.** [US/US]; 689 Tor-
rington Drive, Sunnyvale, CA 94087 (US).

(74) Agent: **BERTRAM, Rainer**; Grünecker, Kinkeldey,
Stockmair & Schwanhäusser, Leopoldstrasse 4, 80802
München (DE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: RELAXATION OF STRAINED LAYERS

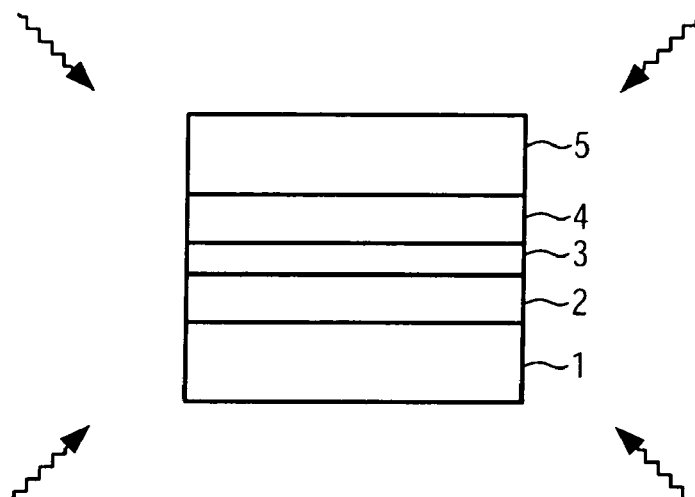


FIG. 1

(57) Abstract: The present invention relates
to a method for relaxing a strained material
layer, comprising depositing a first low-vis-
cosity layer comprising a first compliant ma-
terial on the strained material layer, deposit-
ing a second low-viscosity layer comprising a
second compliant material on the strained
material layer to form a first sandwiched
structure and subjecting the first sandwiched
structure to a heat treatment such that reflow
of the first and the second low-viscosity lay-
ers is caused thereby at least partly relaxing
the strained material layer.

**Published:****(88) Date of publication of the international search report:**

14 May 2010

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*