

Title (en)

METHOD FOR TRANSFERRING A USEFUL LAYER ONTO A SUPPORT SUBSTRATE

Title (de)

VERFAHREN ZUR ÜBERTRAGUNG EINER NÜTZLICHEN SCHICHT AUF EIN TRÄGERSUBSTRAT

Title (fr)

PROCEDE DE TRANSFERT D'UNE COUCHE UTILE SUR UN SUBSTRAT SUPPORT

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Application

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Abstract (en)

[origin: WO2020188167A1] The invention relates to a method for transferring an useful layer onto a support substrate, said method involving the following steps: a) providing a donor substrate comprising a buried fragile plane, the useful layer being delimited by a front face of the donor substrate and the buried fragile plane; b) providing a support substrate; c) joining the donor substrate by its front face to the support substrate over a bonding interface to form a bonded structure; d) annealing the bonded structure to increase the break-off level of the buried fragile plane; the transfer method being characterized in that: - a predetermined stress is applied to the buried fragile plane during the annealing step d) for a period of time, the predetermined stress being selected so as to initiate the fracture wave when a given break-off level is reached; - at the end of said period of time, when the given break-off level has been reached, the predetermined stress causes the initiation and self-propagation of the fracture wave along the buried fragile plane, leading to the transfer of the useful layer onto the support substrate.

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