

ABSTRACT**PROCESS FOR TRANSFERRING BLOCKS FROM A DONOR SUBSTRATE TO A
RECEIVER SUBSTRATE**

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The present invention relates to a process for transferring blocks (9) from a donor substrate (1) to a receiver substrate (20), comprising the following steps:

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- arranging a mask (2) facing a free surface (3) of the donor substrate, the mask (2) having one or more openings (4) that expose the free surface (3) of the donor substrate, these being distributed according to a given pattern (10), so as to form at least one exposed region of the free surface of the donor substrate, and at least one region (5) covered by the mask,

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- forming, by ion implantation through the mask (2), an embrittlement plane (7) localized in the donor substrate (1) vertically in line with at least one exposed region, said embrittlement plane (7) delimiting, in the thickness of the donor substrate, a respective surface region (8),

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- forming a block (9) that is raised relative to the free surface (3) of the donor substrate localized vertically in line with each respective embrittlement plane (7), said block comprising the respective surface region (8),

- bonding the donor substrate (1) to the receiver substrate (20) via each block (9) located at the bonding interface, after having removed the mask (2),

- detaching the donor substrate (1) along each localized embrittlement plane (7) in order to transfer each respective block (9) to the receiver substrate (20).

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Fig. 3