

ABSTRACT**Process for transferring a layer**

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Layer transfer process comprising a step of providing an initial substrate; a step of providing an intermediate substrate; a first step of joining the intermediate substrate and the initial substrate; a step of thinning the initial substrate after having been joined to the intermediate substrate; a step of providing a final substrate; a second step of joining the thinned initial substrate and the final substrate; a step of detaching the intermediate substrate after the second joining step, wherein the intermediate substrate comprises silicon on the surface that is intended to be joined to the initial substrate; the initial substrate comprises substantially no silicon on the surface that is intended to be joined to the intermediate substrate; depositing a first bonding layer, referred to as temporary, of SOG type comprising methylsiloxane in the liquid state by spin coating carried out on the surface of the initial substrate which comprises substantially no silicon followed by a first heat treatment for densifying this first, temporary, bonding layer before the first joining step; the second joining step is carried out via a second bonding layer of SOG type comprising silicate or methylsilsexioquane in the liquid state and deposited by spin coating followed by a second densifying heat treatment; and wherein the final substrate is designed such that it would deteriorate on application of a heat treatment exceeding 300°C.

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Figure 1