

ABSTRACT

METHOD FOR PRODUCING A DEVICE DEFINING A VOLUME
FOR RETAINING A FLUID OR A SENSITIVE MATERIAL

The present invention concerns a method of manufacturing at least one device (2, 30, 48) defining a volume (8) for retaining a fluid or a sensitive material that is capable of changing its physical properties, particularly its optical properties, via the application of a voltage, or its electrical properties via stress or radiation, said

5 device (2, 30, 48) including at least a first front substrate (4, 38, 56) and at least a second back substrate (6, 32, 50) maintained at a constant distance from each other, these two substrates (6, 32, 50; 4, 38, 56) being joined by a sealing joint (24, 46, 72) which defines the volume (8) for retaining the sensitive medium or fluid,

said method being characterised in that it includes the steps of:

10 - structuring at least one wall (12, 44, 66), which defines via its inner lateral face the volume (8) for retaining the sensitive medium or fluid, on one of the substrates (6, 32, 50);

- joining the second substrate (4, 38, 56) to the first substrate (6, 32, 50);

- introducing a sealing material capable of flowing into the gap (22) defined by

15 the outer lateral face of the wall (12, 44, 66) and the two superposed substrates (6, 32, 50; 4, 38, 56) until at least a part of the volume of said gap (22) is occupied by the sealing material, and

- solidifying the sealing material so that the latter forms the sealing frame (26, 46, 72).

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Figure 2