

## Title (en)

ELECTRICAL CONNECTION BETWEEN TWO SURFACES OF A SUBSTRATE AND METHOD FOR PRODUCING SAME

## Title (de)

ELEKTRISCHE VERBINDUNG ZWISCHEN ZWEI SUBSTRATOBERFLÄCHEN UND VERFAHREN ZU DEREN REALISIERUNG

## Title (fr)

CONNEXION ELECTRIQUE ENTRE DEUX FACES D'UN SUBSTRAT ET PROCEDE DE REALISATION

## Publication

**EP 1259983 A1 20021127 (FR)**

## Application

**EP 01909909 A 20010227**

## Priority

- FR 0100565 W 20010227
- FR 0002446 A 20000228

## Abstract (en)

[origin: FR2805709A1] The electrical connection between two sides of a conductor or semiconductor substrate (20) comprises at least one electrically insulating trench (36,44) extending in full thickness of substrate, filled to at least part of its height, and completely surrounding a part (46) of substrate, and two conductors, one in the form of a contact pad (42) on lower side of substrate in part (46). The electrical connection is established by the part (46) of substrate and the two conductors (38,42). The first trench is etched in the substrate starting on upper side and is filled with an electrically insulating material. The filled part of trench is the first trench whose walls are covered with an insulating layer, and the trench is filled with another material (36) whose coefficient of thermal expansion is close to that of the substrate. The trench comprises a non-filled part formed by the second trench (44) etched in the substrate starting on lower side (40). The second trench is also filled. The method for producing the electrical connection comprises operations which include the making and filling of trench, the deposition of first conductor, and the formation of second conductor. The substrate is thinned to a desired thickness before the formation of second trench, and the second conductor is formed on the thinned side.

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## Citation (search report)

See references of WO 0165598A1

## Citation (examination)

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