

**ABSTRACT****STRUCTURE FOR RADIOFREQUENCY APPLICATIONS**

5           The invention relates to a substrate for radiofrequency microelectronic devices comprising:

- A support substrate (10) made of a first semiconductor material (10') with a resistivity greater than 500 ohms.cm;

10           • A plurality of trenches in the support substrate (10) filled with a second material (20) and defining a plurality of first zones (11) on a first side (1) of the support substrate (10) made of the first material (10') and at least one second zone (21) of second material (20);

15           The substrate is remarkable in that:

- The second material (20) has a resistivity greater than 10 kohms.cm;

- The first zones (11) have a maximum dimension of less than 10 microns and are isolated from one another by the

20           second zone (21).

**Figure 2**