

Abstract

Method for producing a composite body from a basic body of opaque quartz glass and a dense sealing layer

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To optimize a known method for producing a composite body from a basic body of opaque quartz glass and a dense sealing layer, in such a way that the basic body can be provided with the dense sealing layer without any significant changes and deformations in the opaque material being noticed, the invention suggests a

10 method comprising the following steps: (a) producing the basic body by using a first slip which contains larger amorphous SiO_2 particles; (b) providing a second slip which contains smaller amorphous SiO_2 particles and the composition of which differs from that of the first slip at least in that it contains SiO_2 nanoparticles in the range between 0.2% by wt. to 15% by wt. and which is distinguished by a

15 relatively low vitrification temperature; (d) producing a slip layer from the second slip on a surface of the basic body, drying the slip layer, and (e) subsequently vitrifying the slip layer with formation of the dense sealing layer.