

Title (en)

TRANSPARENT GLASS-CERAMICS BASED ON ALPHA- AND BETA-WILLEMITE

Title (de)

TRANSPARENTE GLASSKERAMIK AUF DER BASIS VON ALPHA- UND BETAWILLEMITE

Title (fr)

VITROCERAMIQUES TRANSPARENTS A BASE DE WILLEMITE ALPHA- ET BETA

Publication

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Application

**EP 00970840 A 20001012**

Priority

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- US 16013899 P 19991018

Abstract (en)

[origin: WO0128943A1] A glass-ceramic which is substantially and desirably totally transparent, and which contains a willemite predominant crystal phase within the ternary  $\text{Mg}_2\text{SiO}_4\text{-Zn}_2\text{SiO}_4\text{-Li}_4\text{SiO}_4$  system. The glass-ceramic is formed from precursor glasses having the following compositions, in weight percent on an oxide basis, of 25-60  $\text{SiO}_2$ , 4-20  $\text{Al}_2\text{O}_3$ , 20-55  $\text{ZnO}$ , 0-12  $\text{MgO}$ , 0-18  $\text{K}_2\text{O}$ , 0-12  $\text{Na}_2\text{O}$ , 0-30  $\text{GeO}_2$ , with the condition that  $\text{SIGMA K}_2\text{O} + \text{Na}_2\text{O} \geq 5$ . The glass-ceramic may be doped with up to 1 wt. %  $\text{Cr}_2\text{O}_3$  to impart optical activity thereto.

IPC 1-7

**C03C 10/04**; **C09K 11/08**; **C09K 11/59**

IPC 8 full level

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