

Title (en)  
MULTI-PHASE CALCIUM SILICATE HYDRATES, METHODS FOR THEIR PREPARATION, AND IMPROVED PAPER AND PIGMENT PRODUCTS PRODUCED THEREWITH

Title (de)  
MULTIPHASIGE CALSIUMSILIKATHYDRATE, VERFAHREN ZUR HERSTELLUNG DERSELBEN UND VERBESSERTE PAPIER- UND PIGMENT-PRODUKTE DIESE ENTHALTEND

Title (fr)  
HYDRATES DE SILICATE DE CALCIUM A PHASES MULTIPLES, LEURS PROCEDES DE PREPARATION ET PRODUITS AMELIORES A BASE DE PAPIER ET DE PIGMENTS FABRIQUES A PARTIR DE CES HYDRATES

Publication  
**EP 1235758 B1 20051130 (EN)**

Application  
**EP 00957850 A 20000826**

Priority  
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Abstract (en)  
[origin: WO0114274A1] A method for the hydrothermal preparation of calcium silicate hydrates. Multi-phase calcium silicate hydrates, having unique physical and chemical properties, are prepared by hydrothermal reaction of specified ratios of CaO and SiO<sub>2</sub>, normally starting from slurries of slaked lime and from fluxed calcined diatomaceous earth, each of which is at about the atmospheric boiling point before being mixed and charged to a reactor, and pressurized. The hydrothermal reaction is carried out while maintaining the initial dilution for a preselected reaction time at a preselected reaction temperature. The calcium silicate hydrates produced have high water absorption and light scattering power, and have optical and physical properties making them highly desirable as a filler substitute in papermaking.

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IPC 8 full level  
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**WO 0114274 A1 20010301**; AT E311353 T1 20051215; AU 6941100 A 20010319; CA 2382869 A1 20010301; CA 2382869 C 20130402; DE 60024483 D1 20060105; DE 60024483 T2 20060817; EP 1235758 A1 20020904; EP 1235758 A4 20021113; EP 1235758 B1 20051130

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