

Title (en)

OPTICAL COMPONENT MADE OF SILICA GLASS AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

OPTISCHES BAUTEIL AUS QUARZGLAS UND VERFAHREN FÜR SEINE HERSTELLUNG

Title (fr)

COMPOSANT OPTIQUE EN VERRE QUARTZEUX ET SON PROCEDE DE PRODUCTION

Publication

EP 1049654 A1 20001108 (DE)

Application

EP 99969079 A 19990514

Priority

- DE 19841932 A 19980914
- EP 9903342 W 19990514

Abstract (en)

[origin: DE19841932A1] An UV transmitting optical component consists of a flame hydrolysis deposited and directly vitrified quartz glass of extremely low hydrogen content. An optical component for transmitting UV radiation of ≤ 250 nm wavelength consists of quartz glass formed by direct vitrification of fine grained SiO₂ deposited on a substrate by flame hydrolysis of a chlorine-free silicon compound. The quartz glass has a hydrogen content of less than 5×10^{-16} molecules/cm³. An Independent claim is also included for production of the above optical component, the quartz glass being subjected to a hydrogen content reduction treatment. Preferred Features: The hydrogen content reduction treatment comprises treatment in vacuum and/or a chemically reactive atmosphere.

IPC 1-7

C03C 3/06; **C03B 19/14**

IPC 8 full level

C03B 8/04 (2006.01); **C03B 19/14** (2006.01); **C03B 20/00** (2006.01); **C03C 3/06** (2006.01); **C03C 4/00** (2006.01)

CPC (source: EP KR)

C03B 19/1453 (2013.01 - EP KR); **C03C 3/06** (2013.01 - EP KR); **C03C 4/0085** (2013.01 - EP KR); **C03B 2201/21** (2013.01 - EP KR); **C03B 2201/23** (2013.01 - EP KR); **C03B 2207/32** (2013.01 - EP KR); **C03C 2201/21** (2013.01 - EP KR); **C03C 2201/23** (2013.01 - EP KR); **C03C 2203/40** (2013.01 - EP KR)

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