

Title (en)

PLASMA SURFACE TREATMENT OF SILICONE HYDROGEL CONTACT LENSES

Title (de)

OBERFLÄCHENBEHANDLUNG VON SILIKONHYDROGEL-KONTAKTLINSEN MITTELS EINES PLASMAS

Title (fr)

TRAITEMENT D'UNE SURFACE DE LENTILLE DE CONTACT AU PLASMA

Publication

EP 1080139 A1 20010307 (EN)

Application

EP 99918763 A 19990421

Priority

- US 9908781 W 19990421
- US 8433498 P 19980505

Abstract (en)

[origin: WO9957178A1] The present invention provides an optically clear, hydrophilic coating upon the surface of a silicone hydrogel lens by subjecting the surface of the lens to a process comprising plasma treatment, hydration, and heat sterilization that is controlled to result in a silicate-containing film having a mosaic pattern of projecting plates surrounded by fissures when viewing a 50x50 micron square AFM image in which the surface is nitrogen enriched compared to the pre-plasma treated lens.

IPC 1-7

C08J 7/06; **G02B 1/04**

IPC 8 full level

G02C 7/04 (2006.01); **C08J 7/00** (2006.01); **C08J 7/04** (2006.01); **C08J 7/06** (2006.01); **C08J 7/12** (2006.01); **G02B 1/04** (2006.01)

CPC (source: EP KR)

B82Y 15/00 (2013.01 - EP); **C08J 7/123** (2013.01 - EP KR); **G02B 1/043** (2013.01 - EP KR); **G02B 3/0012** (2013.01 - KR); **C08J 2343/04** (2013.01 - EP KR); **C08J 2383/04** (2013.01 - EP KR)

Designated contracting state (EPC)

DE ES FR GB IE IT

DOCDB simple family (publication)

WO 9957178 A1 19991111; AU 3660399 A 19991123; AU 740054 B2 20011025; BR 9910346 A 20010109; CA 2328898 A1 19991111; CN 1299388 A 20010613; EP 1080139 A1 20010307; ID 27989 A 20010503; JP 2002513948 A 20020514; KR 20010043298 A 20010525; TW 442538 B 20010623

DOCDB simple family (application)

US 9908781 W 19990421; AU 3660399 A 19990421; BR 9910346 A 19990421; CA 2328898 A 19990421; CN 99805864 A 19990421; EP 99918763 A 19990421; ID 20002249 A 19990421; JP 2000547143 A 19990421; KR 20007012260 A 20001103; TW 88107304 A 19990507