

Title (en)
GLASS MATERIAL FOR USE AT HIGH FREQUENCIES

Title (de)
GLASMATERIAL FÜR HOCHFREQUENZANWENDUNGEN

Title (fr)
MATERIAU VITREUX POUR APPLICATIONS HAUTES FREQUENCES

Publication
EP 1506578 A2 20050216 (DE)

Application
EP 03755118 A 20030523

Priority

- EP 03755118 A 20030523
- DE 10222609 A 20020523
- EP 0305414 W 20030523
- EP 0303907 W 20030415

Abstract (en)
[origin: US2007166520A1] To improve the radio-frequency properties of radio-frequency substrates or radio-frequency conductor arrangements, the invention proposes a glass material for producing insulation layers for radio-frequency substrates or radio-frequency conductor arrangements, which, as an applied layer, in particular with a layer thickness in the range between 0.05 µm and 5 mm, has a loss factor tan delta of less than or equal to 70*10⁻⁴ in at least a frequency range above 1 GHz.

IPC 1-7
H01L 23/498

IPC 8 full level
H05K 3/46 (2006.01); **B81C 1/00** (2006.01); **C03B 19/00** (2006.01); **C03C 4/12** (2006.01); **C03C 14/00** (2006.01); **C03C 15/00** (2006.01); **C03C 17/02** (2006.01); **C03C 17/34** (2006.01); **C23C 14/10** (2006.01); **H01L 21/316** (2006.01); **H01L 21/50** (2006.01); **H01L 21/56** (2006.01); **H01L 21/768** (2006.01); **H01L 23/10** (2006.01); **H01L 23/29** (2006.01); **H01L 23/31** (2006.01); **H01L 23/48** (2006.01); **H01L 23/498** (2006.01); **H01L 23/532** (2006.01); **H01L 23/66** (2006.01); **H01L 51/52** (2006.01); **H01P 11/00** (2006.01); **H05K 3/28** (2006.01)

CPC (source: EP US)
C03B 19/00 (2013.01 - EP US); **C03C 3/083** (2013.01 - EP US); **C03C 3/089** (2013.01 - EP US); **C03C 4/12** (2013.01 - EP US); **C03C 14/006** (2013.01 - EP US); **C03C 15/00** (2013.01 - EP US); **C03C 17/02** (2013.01 - EP US); **C03C 17/34** (2013.01 - EP US); **C23C 14/10** (2013.01 - EP US); **H01L 21/02129** (2013.01 - US); **H01L 21/02161** (2013.01 - US); **H01L 21/02263** (2013.01 - EP US); **H01L 21/31616** (2013.01 - US); **H01L 21/31625** (2013.01 - US); **H01L 21/50** (2013.01 - EP US); **H01L 21/56** (2013.01 - EP US); **H01L 23/10** (2013.01 - EP US); **H01L 23/291** (2013.01 - EP US); **H01L 23/3114** (2013.01 - EP US); **H01L 23/481** (2013.01 - US); **H01L 23/5329** (2013.01 - EP); **H01L 23/66** (2013.01 - EP US); **H01L 24/97** (2013.01 - EP US); **H01P 3/003** (2013.01 - EP US); **H01P 11/003** (2013.01 - EP US); **H05K 3/467** (2013.01 - EP US); **H10K 50/8426** (2023.02 - US); **H10K 50/844** (2023.02 - US); **H10K 50/846** (2023.02 - US); **C03C 2214/16** (2013.01 - EP US); **C03C 2217/21** (2013.01 - EP US); **C03C 2218/15** (2013.01 - EP US); **C03C 2218/32** (2013.01 - EP US); **C03C 2218/328** (2013.01 - EP US); **C03C 2218/33** (2013.01 - EP US); **C03C 2218/355** (2013.01 - EP US); **H01L 21/02129** (2013.01 - EP); **H01L 21/02161** (2013.01 - EP); **H01L 23/481** (2013.01 - EP); **H01L 23/49894** (2013.01 - EP US); **H01L 2223/6627** (2013.01 - EP US); **H01L 2224/97** (2013.01 - EP US); **H01L 2924/01004** (2013.01 - EP US); **H01L 2924/01005** (2013.01 - EP US); **H01L 2924/01006** (2013.01 - EP US); **H01L 2924/01011** (2013.01 - EP US); **H01L 2924/01013** (2013.01 - EP US); **H01L 2924/01015** (2013.01 - EP US); **H01L 2924/01019** (2013.01 - EP US); **H01L 2924/0102** (2013.01 - EP US); **H01L 2924/01027** (2013.01 - EP US); **H01L 2924/01033** (2013.01 - EP US); **H01L 2924/0106** (2013.01 - EP US); **H01L 2924/01068** (2013.01 - EP US); **H01L 2924/01072** (2013.01 - EP US); **H01L 2924/01078** (2013.01 - EP US); **H01L 2924/01082** (2013.01 - EP US); **H01L 2924/04953** (2013.01 - EP US); **H01L 2924/09701** (2013.01 - EP US); **H01L 2924/12041** (2013.01 - EP US); **H01L 2924/12044** (2013.01 - EP US); **H01L 2924/15311** (2013.01 - EP US); **H01L 2924/1903** (2013.01 - EP US); **H01L 2924/19033** (2013.01 - EP US); **H01L 2924/19041** (2013.01 - EP US); **H01L 2924/19042** (2013.01 - EP US); **H01L 2924/19043** (2013.01 - EP US); **H01L 2924/351** (2013.01 - EP US); **H05K 3/28** (2013.01 - EP US); **H05K 2201/0179** (2013.01 - EP US); **H10K 50/805** (2023.02 - US); **H10K 50/85** (2023.02 - US); **Y02P 40/57** (2015.11 - EP US); **Y10T 428/24917** (2015.01 - EP US)

C-Set (source: EP US)
1. **H01L 2224/97 + H01L 2924/15311**
2. **H01L 2924/351 + H01L 2924/00**

Citation (examination)

- US 6329702 B1 20011211 - GRESHAM ROBERT IAN [US], et al
- US 5696466 A 19971209 - LI PING [US]
- US 5639325 A 19970617 - STEVENS RALPH E [US], et al
- See also references of WO 03100846A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2007166520 A1 20070719; US 8273671 B2 20120925; AU 2003247287 A1 20031212; AU 2003247287 A8 20031212; CN 1656612 A 20050817; EP 1506578 A2 20050216; JP 2005535108 A 20051117; JP 2006513558 A 20060420; JP 2010153927 A 20100708; JP 5027992 B2 20120919; WO 03100846 A2 20031204; WO 03100846 A3 20040318

DOCDB simple family (application)
US 51487603 A 20030523; AU 2003247287 A 20030523; CN 03811821 A 20030523; EP 0305414 W 20030523; EP 03755118 A 20030523; JP 2004508402 A 20030523; JP 2004508410 A 20030523; JP 2010086382 A 20100402