Title (en)

LASER PROCESS FOR THE IMPLEMENTATION OF METALLIC NANOPARTICLES INTO THE SURFACE OF LARGE SIZE GLASS SUBSTRATES

Title (de)

LASERVERFAHREN ZUR EINFÜHRUNG VON METALLISCHEN NANOPARTIKELN IN EINE OBERFLÄCHE GROSSER GLASSUBSTRATE

Title (fr)

PROCÉDÉ LASER POUR LA MISE EN UVRE DE NANOPARTICULES MÉTALLIQUES À L'INTÉRIEUR DE LA SURFACE DE SUBSTRATS EN VERRE DE GRANDE TAILLE

Publication

EP 3044178 A1 20160720 (EN)

Application

EP 14777280 A 20140910

Priority

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- EP 2014069273 W 20140910
- EP 14777280 A 20140910

Abstract (en)

[origin: WO2015036426A1] A method for modification of optical properties of a glass substrate (1) by generation of nanoparticles comprising a) deposition of at least one metal compound containing layer (2) onto the glass substrate (1), b)focusing a laser line (4) onto the metal compound containing layer (2), c) laser processing of the glass substrate (1) with metal compound containing layer (2) by movement of the glass substrate (1) in direction x relative to the laser line(4), wherein the glass substrate (1) has got a width of 0.10 m to 5.00 m perpendicular to the direction x and wherein laser induced diffusion of metal ions from the metal compound containing layer (2) into the glass substrate (1) and/or other neighboring layers takes place and nanoparticles are generated within the glass substrate (1) and/or other neighboring layers during step c).

IPC 8 full level

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CPC (source: EP)

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See references of WO 2015036426A1

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