

Title (en)

Zirconia alloy cylinders and sleeves for lithographic imaging and printing methods

Title (de)

Zylinder und Hüllen für lithographische Bildanzeichnungs- und Druckmethoden auf der Basis von Zirkoniumlegierungen

Title (fr)

Cylindres et manchons à base d'un alliage de zircone pour l'enregistrement et l'impression lithographique

Publication

**EP 0872339 B1 20020306 (EN)**

Application

**EP 97302662 A 19970418**

Priority

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Abstract (en)

[origin: EP0872339A1] Rotary lithographic printing members are prepared from a non-porous zirconia ceramic that is an alloy of ZrO<sub>2</sub> and a second oxide chosen from MgO, CaO, Y<sub>2</sub>O<sub>3</sub>, Sc<sub>2</sub>O<sub>3</sub>, a rare earth oxide or a combination of any of these. These printing members can be rotary printing cylinders having a zirconia alloy ceramic printing surface. Such cylinders can be composed of zirconia alloy ceramic throughout, or have a ceramic sleeve or shell mounted around a non-ceramic core. In use, the surface of the zirconia alloy ceramic printing member is imagewise exposed to infrared radiation which transforms it from a hydrophilic to an oleophilic state or from an oleophilic to a hydrophilic state, thereby creating a lithographic printing surface which is hydrophilic in non-image areas and is oleophilic and thus capable of accepting printing ink in image areas. These printing members are directly laser-imageable as well as image erasable. <IMAGE>

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