

Title (en)

Highly reinforced elastomer for use in downhole stators

Title (de)

Hochverstärktes Elastomer für Untertagestatoren

Title (fr)

Élastomère fortement renforcé pour une utilisation dans des stators de fond de trou

Publication

**EP 1892416 A1 20080227 (EN)**

Application

**EP 07253324 A 20070822**

Priority

US 51038406 A 20060825

Abstract (en)

A Moineau stator for a downhole drilling motor and a method for fabricating the stator are disclosed. The stator includes an internal helical cavity component fabricated from an improved elastomeric material formulated to provide both high resilience and good processability. For example, in one exemplary embodiment the elastomer material includes rheological parameters M L in a range from about 1.0 to about 4.0 lb-in and M H in a range from about 75 to about 110 lb-in according to ASTM D2084 at 380 degrees F. Stators in accordance with this invention may exhibit improved efficiency (and may thus provide improved torque output) as compared with conventional stators without substantially increasing manufacturing costs.

IPC 8 full level

**F04C 2/107** (2006.01); **E21B 4/02** (2006.01)

CPC (source: EP US)

**E21B 4/02** (2013.01 - EP US); **F04C 2/1075** (2013.01 - EP US); **F05C 2225/02** (2013.01 - EP US)

Citation (search report)

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DOCDB simple family (publication)

**EP 1892416 A1 20080227**; CA 2598813 A1 20080225; US 2008050259 A1 20080228

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