

Title (en)
LUBRICATION OF SCREW MACHINES

Title (de)
SCHMIERUNG VON SCHRAUBMASCHINEN

Title (fr)
LUBRIFICATION DE MACHINES À VIS

Publication
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Application
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Abstract (en)
[origin: GB2477777A] A screw machine and method for use with a working fluid with a liquid phase present comprises rotors 10, 16 having meshed, lubricated helical formations. The rotors have an 'N' profile as disclosed in WO 97/43550. In use, lubrication of the helical formations of the rotors 10, 16 and optionally of the rotor bearings 28 is achieved substantially exclusively with the liquid phase of the working fluid. The helical formations may be coated with a low friction coating which may comprise a carbide phase and a carbon phase. The bearings may take the form of hydrodynamic bearings or rolling-element bearings. The working fluid may be wet steam, with the liquid phase being water. The screw machine may be a screw expander.

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