

GREASE-LUBRICATED SLIDING GUIDING MEMBERS HAVING A LOW
COEFFICIENT OF FRICTION AND AN IMPROVED LIFETIME

ABSTRACT OF THE DISCLOSURE

Guiding device for mechanical members, which consists of two parts intended to engage by sliding friction, one of the two parts, called the smooth part (11), having a smooth, functional, that is to say friction, surface and the other part, called the pierced part (8), having at least one functional, that is to say friction, surface (7), which include emergent cavities (9) intended to accommodate a grease of the lubricating-paste type and especially an EP grease (extreme-pressure grease) comprising a soap-type constituent, an oil-type constituent and an extreme-pressure additive, characterized in that the contact angle θ between said functional surface of said smooth part and said grease is between 20 and 40 degrees and in that the material of said pierced part is chosen in such a way that the contact angle between said functional surface of the pierced part and said grease is between 45 and 75 degrees.

The device of the invention may be of the slideway/runner type, shaft/bearing type, ball/socket joint type, etc.

Figure 6.