

Title (en)
LINEAR GUIDE FOR MACHINE TOOLS

Title (de)
LINEARFÜHRUNG FÜR WERKZEUGMASCHINEN

Title (fr)
DISPOSITIF DE GUIDAGE LINÉAIRE POUR MACHINES-OUTILS

Publication
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Application
EP 13796083 A 20131128

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Abstract (en)
[origin: WO2014086653A2] To improve a linear guide for machine tools, comprising a guide rail which extends in a longitudinal direction and which has a constant cross-sectional shape in the longitudinal direction and comprising at least one guide carriage which is guided on the guide rail and which engages over the guide rail in sub-regions of the cross-sectional shape, such that said machine tools firstly ensure precise guidance of the guide carriage relative to the guide rail and secondly exhibit high rigidity and intense damping with respect to vibrations, it is proposed that the guide carriage is guided on the guide rail by way of at least one sliding guide which has at least one sliding support surface provided on the guide rail and against which a sliding contact surface of the guide carriage bears, that the guide carriage is guided on the guide rail by way of at least one rolling-body guide which has at least one rolling-body raceway arranged on the guide rail and one rolling-body arrangement provided on the guide carriage, the rolling bodies of which rolling-body arrangement are movable in rolling fashion along the rolling-body raceway of the guide rail, and that the at least one sliding guide and the at least one rolling-body guide are arranged and designed such that they absorb differently oriented supporting forces that act on the guide carriages and perpendicular to the longitudinal direction of the guide rail.

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See references of WO 2014086653A2

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