

Title (en)  
COMPACTING AND SINTERING STEEL POWDER

Title (de)  
PRESSEN UND SINTERN VON STAHPULVER

Title (fr)  
COMPRESSION ET FRITTAGE DE POUDRE D'ACIER

Publication  
**EP 1246950 A1 20021009 (EN)**

Application  
**EP 00981941 A 20001214**

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• PL 33763799 A 19991231

Abstract (en)  
[origin: WO0149891A1] The invention concerns a method of getting shaped elements by pressing, sintering and cold-compacting of powder mixtures of steel with alloy additions, being used for production of machine parts, e.g. gears, bearings and others of high surface pressure strength and wear resistance. The method is characterized in that a preformed semi-final product is treated with presintering, preferably in dissociated-ammonia atmosphere at temperature 700 - 750 DEG C, preferably 720 - 730 DEG C during 20 - 40 min, preferably 30 min, and first compacting under pressure 700 - 800 MPa, preferably 750 MPa, and then second compacting with simultaneous calibration under pressure 900 - 1000 MPa, preferably 950 MPa, then is treated with final sintering at temperature 1100 - 1200 DEG C, preferably 1120 - 1150 DEG C, during 40 - 50 min, preferably 45 min.

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