

Title (en)
Internal combustion cylinder, method and device

Title (de)
Verfahren und Vorrichtung zum Herstellen eines Zylinders einer Brennkraftmaschine

Title (fr)
Cylindre à combustion interne, méthode et dispositif

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Application
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DE 4109308 A 19910321

Abstract (en)
[origin: EP0504605A1] 2.1. Cylinder liners are exposed to ever increasing stresses due to pressure and temperature, especially in their upper region. This gives rise to the requirement for the cylinder liner to be manufactured from very high-strength steel. At the same time, however, there should be no deterioration in the running characteristics of the piston rings on the surface of the cylinder liner relative to the running properties which can be achieved with grey cast iron. This double requirement has hitherto been met by spin-on deposition of a layer of grey cast iron on the inner surface of the cylinder liner but has the disadvantage of a very long cooling time and wide variations in quality. 2.3. In the method according to the invention, the steel ring (5) is heated to white heat in a casting mould (4) by means of an induction coil (6). Immediately following this, the casting mould (4) is filled with molten grey cast iron via casting channels (11). After the compound blank has cooled, it is removed from the casting mould (4) by the destruction of the latter and taken for further processing. 2.3. The method can be used for all cylinder liners made of grey cast iron. <IMAGE>

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