

Title (en)

COMPONENT OF A BRAKE FOR A VEHICLE

Title (de)

BAUTEIL EINER BREMSE FÜR EIN FAHRZEUG

Title (fr)

ÉLÉMENT STRUCTURAL D'UN FREIN CONÇU POUR UN VÉHICULE

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Application

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Abstract (en)

[origin: WO2020043712A1] The invention relates to a component of a brake for a vehicle, comprising a metal main body having a surface (5a, 5b) that is provided with a coating (B) for increasing the wear resistance thereof, said coating comprising an intermediate layer (Z) deposited on the main body (2), and a cover layer (D) deposited on the intermediate layer (Z), wherein the intermediate layer (Z) has a higher toughness than the cover layer (D), which in turn has a higher hardness than the intermediate layer (Z). The aim of the invention is to simplify the production of such a component and to optimize the wear resistance thereof. This aim is achieved, according to the invention, in that the intermediate layer (Z) is formed of an Ni or Cr alloy each having an Ni or Cr content of more than 50 wt%, and optionally, in order to improve the wear resistance, having hard material particles embedded in the intermediate layer, and in that the cover layer (D) is formed from a high-grade steel matrix having hard material particles embedded therein, wherein the thermal conductivity of the main body (2) is 1.5 to 3 times greater than the thermal conductivity of the intermediate layer (Z), the thermal conductivity of the cover layer (D) is 2 to 4.5 times greater than the thermal conductivity of the main body (2), and the thickness ratio $V_d - D_d/D_z$ formed from the thickness D_z of the intermediate layer (Z) and the thickness D_d of the cover layer (D) is $V_d \geq 1.5$.

IPC 8 full level

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