

Title (en)
FLAT STEEL PRODUCT HAVING IMPROVED PROCESSING PROPERTIES

Title (de)
STAHLFLACHPRODUKT MIT VERBESSERTEN VERARBEITUNGSEIGENSCHAFTEN

Title (fr)
PRODUIT PLAT EN ACIER AYANT DES PROPRIÉTÉS DE TRAITEMENT AMÉLIORÉES

Publication
EP 4174207 A1 20230503 (DE)

Application
EP 21205912 A 20211102

Priority
EP 21205912 A 20211102

Abstract (en)
[origin: US2023136262A1] A flat steel product for production of a sheet metal component by hot forming includes a steel substrate consisting of a steel including 0.1-3% by weight of Mn and optionally up to 0.01% by weight of B, an aluminium-based coating disposed on at least one side of the steel substrate. A coating here has an applied layer weight of 15-30 g/m². In addition, the coating has an Al base layer consisting of 1.0-15% by weight of Si, optionally 2-4% by weight of Fe, 0.1-5.0% by weight of alkali metals or alkaline earth metals, and optional further constituents, the contents of which are limited to a total of not more than 2.0% by weight, and aluminium as the balance.

Abstract (de)
Die Erfindung betrifft ein Stahlflachprodukt zur Herstellung eines Blechbauteils durch Warmumformen, aufweisenda) ein Stahlsubstrat, das aus einem Stahl, der 0,1-3 Gew.-% Mn und optional bis zu 0,01 Gew.-% B aufweist, besteht undb) einen auf mindestens einer Seite des Stahlsubstrats angeordneten Überzug auf Aluminium-Basis. Hierbei weist der Überzug ein Auflagengewicht von 15-30 g/m² auf. Weiterhin weist der Überzug eine Al-Basissschicht auf, die aus 1,0 — 15 Gew.-% Si, optional 2-4 Gew.-% Fe, 0,1 - 5,0 Gew.-% Alkali- oder Erdalkalimetalle, und optionalen weiteren Bestandteilen, deren Gehalte in Summe auf höchstens 2,0 Gew.-% beschränkt sind, und als Rest Aluminium besteht.

IPC 8 full level
C23C 2/12 (2006.01); **B21D 22/00** (2006.01); **C21D 1/18** (2006.01); **C21D 1/673** (2006.01); **C21D 1/76** (2006.01); **C21D 7/13** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 21/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/14** (2006.01); **C23C 2/02** (2006.01); **C23C 2/26** (2006.01); **C23C 2/28** (2006.01); **C23C 2/40** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP US)
B21D 22/022 (2013.01 - US); **C21D 1/18** (2013.01 - EP); **C21D 1/673** (2013.01 - EP); **C21D 1/76** (2013.01 - EP); **C21D 7/13** (2013.01 - EP); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0236** (2013.01 - EP US); **C21D 8/0242** (2013.01 - EP); **C21D 8/0273** (2013.01 - EP US); **C21D 8/0278** (2013.01 - EP); **C21D 9/46** (2013.01 - EP US); **C22C 21/02** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP); **C22C 38/14** (2013.01 - EP); **C23C 2/022** (2022.08 - EP); **C23C 2/12** (2013.01 - EP US); **C23C 2/28** (2013.01 - EP); **C23C 2/40** (2013.01 - EP US); **C23C 30/00** (2013.01 - EP); **C21D 2211/008** (2013.01 - EP US)

Citation (applicant)
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Citation (third parties)
Third party : Anonymous
• EP 2993248 B1 20200624 - THYSSENKRUPP STEEL EUROPE AG [DE], et al
• WO 2022048990 A1 20220310 - THYSSENKRUPP STEEL EUROPE AG [DE]
• WO 2023020931 A1 20230223 - THYSSENKRUPP STEEL EUROPE AG [DE]
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BA ME

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KH MA MD TN

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