

## Title (en)

ARTICLES EMBODYING A WEAR RESISTANT SURFACE LAYER AND A METHOD OF MANUFACTURE THEREOF

## Publication

**EP 0234026 A3 19880518 (EN)**

## Application

**EP 86117342 A 19861212**

## Priority

US 83194886 A 19860224

## Abstract (en)

[origin: EP0234026A2] Articles (18, 38, 44, 46, 48) embodying a wear resistant surface layer (34) which are particularly suited for employment in a bowl mill (10) of the type that is operative for purposes of effecting the pulverization therewithin of a material such as coal. Among these articles (18, 38, 44, 46, 48) that embody such a wear resistant surface layer (34) are to be found the rolls (18) which provide the grinding force that is employed for purposes of effecting the pulverization within the bowl mill (10) of material such as coal as well as the liners (44, 46, 48) that for wear resistant purposes are employed in selected regions of the interior of the bowl mill (10). As regards the rolls (18), the wear resistant surface layers (34) thereof, as cast, comprise, by weight percentages, 3.2% - 3.4% Carbon, 1.45% - 1.65% Silicon, 0.4% maximum Manganese, 4.5% - 5.0% Nickel, 4.0% - 4.25% Chromium, 0.4% - 0.5% Phosphorus, 0.9% - 0.11% Sulfur, 0.4% - 0.6% Molybdenum and no Bismuth. On the other hand, insofar as the liners (44, 46, 48) are concerned, the wear resistant surface layers thereof, as cast, comprise, by weight percentages, 3.5% - 3.7% Carbon, 1.2% - 1.6% Silicon, 0.4% maximum Manganese, 4.3% - 5.0% Nickel, 3.7% - 4.4% Chromium, 0.15% - 0.25% Phosphorus, 0.9% - 0.11% Sulfur, 0.4% - 0.6% Molybdenum and 0.015% nominal Bismuth.

## IPC 1-7

**B02C 15/00**; **C22C 37/08**

## IPC 8 full level

**B02C 15/04** (2006.01); **B02C 15/00** (2006.01); **C22C 37/08** (2006.01); **F16C 13/00** (2006.01)

## CPC (source: EP KR)

**B02C 15/001** (2013.01 - EP); **B02C 15/005** (2013.01 - EP); **C22C 37/08** (2013.01 - EP); **C22C 38/56** (2013.01 - KR); **B02C 15/003** (2013.01 - EP); **B02C 2015/002** (2013.01 - EP)

## Citation (search report)

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KR100382575B1

## Designated contracting state (EPC)

BE DE ES FR GB IT NL

## DOCDB simple family (publication)

**EP 0234026 A2 19870902**; **EP 0234026 A3 19880518**; AU 588082 B2 19890907; AU 6916087 A 19870827; CA 1312057 C 19921229; CN 1005537 B 19891025; CN 87100970 A 19870923; IN 166426 B 19900505; JP S62197161 A 19870831; KR 870008049 A 19870923; ZA 871297 B 19870817

## DOCDB simple family (application)

**EP 86117342 A 19861212**; AU 6916087 A 19870223; CA 526697 A 19870105; CN 87100970 A 19870224; IN 803CA1986 A 19861105; JP 2226487 A 19870202; KR 870001547 A 19870224; ZA 871297 A 19870223