

Title (en)

Articles embodying a wear resistant surface layer and a method of manufacture thereof.

Title (de)

Gegenstände, deren Oberfläche mit einer verschleissfesten Schicht versehen ist und Verfahren zu deren Herstellung.

Title (fr)

Articles, dont la surface est pourvue d'une couche en matière résistant à l'usure, et leur procédé de fabrication.

Publication

**EP 0234026 A2 19870902 (EN)**

Application

**EP 86117342 A 19861212**

Priority

US 83194886 A 19860224

Abstract (en)

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 effective 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.

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IPC 8 full level

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CPC (source: EP KR)

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