

## Title (en)

Gas-permeable refractory block and method of making this block.

## Title (de)

Gasdurchlässiger Körper aus feuerfestem Material und Verfahren zu seiner Herstellung.

## Title (fr)

Pièce réfractaire perméable aux gaz et son procédé de fabrication.

## Publication

**EP 0021861 A1 19810107 (FR)**

## Application

**EP 80400536 A 19800421**

## Priority

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- LU 81208 A 19790430

## Abstract (en)

[origin: ES8103718A1] The refractory piece permeable to gases according to the invention is designed to be incorporated in the inner refractory lining of a metallurgical container so that one of its surfaces will be in contact with the molten metal bath in said container, the opposite surface being equipped with means for introducing a gas under pressure. This piece, whose shape is generally hexahedral, consists essentially of a mass of nonporous refractory material that has a number of local discontinuities 8 extending throughout the piece along its height h between the surface in contact with the molten metal and the opposite surface. In an advantageous method of embodiment, the local discontinuities 8 are obtained by an assembly 1, in a metal casing, of nonporous refractory elements 2, in the form of plates and which are placed side by side along their large lateral surfaces, without any material gaskets or seals between them. The piece according to the invention is easy to make. In addition, it has all of the required qualities of selectivity or orientation so that its life will be about as long as the life of the surrounding refractory lining of the metallurgical container in which it is designed to go, while allowing the desired amounts of gas to be blown into the metal bath.

## Abstract (fr)

La pièce selon l'invention est destinée à être mise au contact d'un métal en fusion et se caractérise en ce qu'elle est essentiellement constituée d'une masse en matériau réfractaire non-poreux présentant une pluralité de discontinuités locales s'étendant sur toute sa hauteur dans la direction du soufflage gazeux et constituant des zones étroites de passage gazeux. Dans un mode de réalisation, les discontinuités (8) sont obtenues par assemblage (1), dans une enveloppe métallique (3), d'éléments réfractaires non-poreux (2) en forme de plaques et juxtaposés par leurs grandes faces latérales sans interposition de joints matériels d'étanchéité. La pièce selon l'invention est facilement réalisable. Elle présente en outre toutes les qualités requises de sélectivité ou d'orientation de manière à posséder une durée de vie sensiblement égale à celle du garnissage réfractaire du récipient métallurgique destiné à la recevoir tout en permettant d'insuffler les débits de gaz voulus.

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## CPC (source: EP US)

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## Citation (search report)

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