

METZ Paul Léon

(1918 - 1993)

Dudelange

Patents (details)

1 - Chasse d'eau perfectionnée ¹

LU patent	25317
Application date	19 August 1938

(copy to be obtained from Archives nationales)

2 - Improvements in or relating to the manufacture of low phosphorus steel ²

GB paten	815683
Application date	30 April 1957

The present invention relates to the manufacture of steel from a phosphoric pig-iron by blowing with an oxidizing gas or an oxidizing gaseous mixture.

It is known that in the ordinary basic Bessemer process of manufacturing steel by conversion of pig-iron, steels with very low phosphorus content are obtained with difficulty unless the iron content of the slag is allowed to become very high, which involves a high loss of metal and too great a degree of oxidation of the metal.

The process according to the invention, which produces steels with a very low phosphorus content while avoiding too much oxidation of the metal is characterized in that the major part of the phosphorus content of the pig-iron is eliminated in a first refining phase, the metal obtained is carefully separated from the slag and poured into a ladle, then it is introduced into an apparatus suitable for top-blowing without an exterior source of heat such as a converter or a rotary furnace in which industrially pure oxygen or any other oxidizing gas is injected from the top into the bath, the dephosphorizing agent required for the final elimination of phosphorus being added before or during this second phase of the blowing operation.

(no drawing)

Corresponding patents

LU

¹ it needs to be ascertained that it is not a patent in the name of a homonyme; Paul Léon Metz was a student at the time in Brussels (Collège Saint-Michel)

² this patent relates to the O.C.P. process mentioned in the biography