

Title (en)

PROCESS AND APPARATUS FOR THE CONTINUOUS PYROMETALLURGICAL TREATMENT OF A COPPER-LEAD MATTE

Publication

EP 0171845 B1 19880921 (DE)

Application

EP 85201189 A 19850713

Priority

DE 3429972 A 19840816

Abstract (en)

[origin: US4614541A] A method for the continuous pyrometallurgical processing of copper-lead matte having a high lead content relative to copper. In order to ensure an economical and ecologically satisfactory processing, the following steps are performed in a continuous sequence: (a) In one processing stage a suitable atmosphere is provided and temperatures above 1250 DEG C. and a high turbulence are maintained in a molten bath, volatile lead components are incorporated in a fine dust and liquid matte having a decreased lead content and metallic lead included in a copper-containing lead alloy are produced; (b) in another processing stage, gases which contain free oxygen are blown into or onto the liquid matte which has been produced in stage (a) and is at a temperature above 1250 DEG C. whereby a high-oxygen converter slag and a converter copper containing less than 1% by weight lead are produced and volatilizable impurities contained in the matte are incorporated in a fine dust; and (c) in a third processing stage the converter copper, which contains less than 1% by weight Pb and other impurities, such as Ni, As, Sb, is refined in that a gas which contains free oxygen is blown into or onto the molten bath. The impurities are slagged by a selective oxidation, and a prerefined copper is formed.

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