
Casablanca Mining subsidiary granted electro mining patent in China

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Casablanca Mining announced that the China Patent Office granted a patent for the electro-mining technology owned by Fast Cooper. Casablanca Mining's subsidiary Santa Teresa Minerals, SA owns 60% of Fast Cooper. Patents for the electro mining process have been issued in Chile, South Africa and China and are pending in the United States, Canada, Australia and Brazil.

This patented process is significantly faster, cheaper and more environmentally friendly than traditional copper extraction. Traditionally, copper has been extracted from raw material using the following method:

Copper bearing minerals are concentrated from crushed ores by froth flotation or bioleaching. Heating this material with silica in flash smelting removes much of the iron as slag. The process converts iron sulfides into oxides which in turn react with the silica to form the silicate slag which floats on top of the heated mass. The resulting copper matte is then roasted to convert all sulfides into oxides. The cuprous oxide is converted to blister copper upon heating. This step reduces the copper oxide to copper metal. Natural gas is blown across the blister to remove most of the remaining oxygen and electro refining is performed on the resulting material to produce pure copper.

The electro mining technology subject to the patent revolutionizes copper extraction technology by bypassing nearly all of the traditional copper extraction process, which is expensive, time consuming and environmentally unfriendly and extracts copper directly from crushed raw material using an electrical and chemical process that allows the copper to diffuse through the raw material and attach to a steel plate submerged in a chemical solution. The process is more environmentally friendly as the chemical solution is contained in plastic tanks and water and acid are recycled in a closed system.

Mr Zirk Engelbrecht president of Casablanca Mining said that "We have proactively sought to protect our intellectual property on an international level. Our patent portfolio is a natural extension of our copper mining operations, as we continually seek to improve the efficiency of our mining operations through technological and industrial innovation. We intend to form copper processing joint ventures as well as license the processing technologies to other copper mining companies."

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