

Title (en)

MAGNETIC SORTING APPARATUS, MAGNETIC SORTING METHOD, AND METHOD FOR MANUFACTURING IRON SOURCE

Title (de)

MAGNETISCHE SORTIERVORRICHTUNG, MAGNETISCHES SORTIERVERFAHREN UND VERFAHREN ZUR HERSTELLUNG EINER EISENQUELLE

Title (fr)

APPAREIL DE TRI MAGNÉTIQUE, PROCÉDÉ DE TRI MAGNÉTIQUE ET PROCÉDÉ DE FABRICATION DE SOURCE DE FER

Publication

EP 2910309 B1 20220727 (EN)

Application

EP 13846992 A 20131011

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Abstract (en)

[origin: EP2910309A1] A magnetic separator and a magnetic separation method are provided, where ferromagnetic particles are separated from a powder and granular material containing the ferromagnetic particles efficiently and magnetic separation is performed at a low cost without the need for complicated steps and waste fluid disposal. A magnetic separator according to the present invention includes a conveyer belt to carry a powder and granular material containing ferromagnetic particles, a rotatable hollow belt guide roll having an outer circumference partly wound with the above-described or an other conveyer belt, and a magnetic field application device disposed inside the belt guide roll, wherein the magnetic field application device includes a plurality of magnets inside the belt guide roll, and the ferromagnetic particles are separated in a magnetic field generated by the magnetic field application device. The magnets are arranged in such a way that magnetic poles adjacent in the circumferential direction of the belt guide roll are different from each other and, in addition, are arranged in such a way that adjacent magnetic poles in the width direction of the belt guide roll have the same polarity.

IPC 8 full level

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