

Title (en)
INTELLIGENT STEEL RAIL DRESSING AND GRINDING DEVICE

Title (de)
INTELLIGENTER STAHLSCIENENVERBAND UND SCHLEIFVORRICHTUNG

Title (fr)
DISPOSITIF INTELLIGENT DE DÉCRASSAGE ET DE MEULAGE DE RAILS EN ACIER

Publication
EP 4116487 A1 20230111 (EN)

Application
EP 21764802 A 20210305

Priority
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Abstract (en)
An intelligent steel rail dressing and grinding device. The whole device is composed of a traveling vehicle, a profile detection system, a mileage system, a grinding swing arm mechanism, a single chip microcomputer, a PLC control system and an electric control cabinet. After the traveling vehicle enters a grinding operation area, the steel rail profile is detected in real time during the traveling, the PLC control system automatically adjusts, according to data provided by the single chip microcomputer, the position and posture of each grinding swing arm mechanism, grinding is performed according to a preset steel rail profile, the grinding quality of a steel rail is evaluated by means of the rear profile detection system, and in combination with position information provided by the mileage system, grinding operation data is pushed point by point, significantly improving the grinding quality, efficiency and automation degree. The device can not only perform multistation automatic profile grinding on a steel rail on a track, but also detect the steel rail profile grinding quality in real time, and has the functions of synchronous detection, automatic profiling, multi-head grinding and real-time evaluation.

IPC 8 full level
E01B 31/17 (2006.01)

CPC (source: CN EP)
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