

Title (en)

Device for sorting metal pieces.

Title (de)

Vorrichtung zum Sortieren von Metallteilen.

Title (fr)

Dispositif de tri de pièces métalliques.

Publication

EP 0096092 A1 19831221 (DE)

Application

EP 82104970 A 19820607

Priority

EP 82104970 A 19820607

Abstract (en)

1. Device for the sorting of metal parts (1), in particular of pieces of scrap, according to their composition, when passing through via a conveyor belt (3), under which is fixed close to the underside of the belt an X-ray or isotope radiation source (5), the rays of which penetrate the conveyor belt to reach the metal parts, at least one detector (6) being provided to intercept the rays emitted by the metal parts (1), to which detector a computer is connected which analyses the electrical signals generated by the detector (6) and controls downstream sorting equipment (7), characterized in that the conveyor belt (3) consists of plastic or rubber and does not have any clearances or openings, in that the conveyor belt (3) is concavely channelled transverse to the longitudinal direction, and in that radiation source (5) and a detector (6) are arranged approximately radial to the belt curvature and emit and receive, respectively, rays in particular in this direction.

Abstract (de)

Die Erfindung betrifft ein Verfahren zum Sortieren von Metallteilen im Durchlauf über eine Transporteinrichtung. Die auf die laufende Transporteinrichtung (3) gegebenen Metallteile (1) durchwandern innerhalb eines kurzen Bewegungsbereichs Röntgen- oder Isotopenstrahlen. Die von den Metallteilen (1) abgegebenen Strahlen, insbesondere Röntgenspektren, Röntgenfluoreszenz, werden von mindestens einem Detektor (6) aufgefangen und von einem Rechner analysiert, der nachgeordnete Sortiergeräte (7) steuert.

IPC 1-7

B07C 5/346; **B07C 5/36**

IPC 8 full level

B07C 5/346 (2006.01); **B07C 5/36** (2006.01)

CPC (source: EP)

B07C 5/346 (2013.01); **B07C 5/36** (2013.01); **B07C 2501/0036** (2013.01); **B07C 2501/0054** (2013.01)

Citation (search report)

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