

Title (en)  
CROSSING CONVEYOR-BELTS MAGNETIC SEPARATOR

Publication  
**EP 0006885 B1 19810701 (DE)**

Application  
**EP 78900076 A 19780707**

Priority  
DE 2735150 A 19770804

Abstract (en)  
[origin: WO7900085A1] The magnetic separator with crossing conveyor-belts separates materials having different magnetic susceptibilities. In this separator, the lower belt (1) conveys the material to be treated where the upper belt delivers the material separated. On each side of the belt (2, 3, 4), is a frame which forms a permanent magnetic circuit. Each of these frames is formed by four magnets with oriented magnetization (9, 10, 11, 12, 13, 14, 15, 16) connected in pairs by soft iron strips (5, 6, 7, 8) and interplated elements (17, 18, 19, 20) also made of soft iron. These elements are interconnected by pole pieces (21, 22) forming a working clearance. This arrangement aims at providing a higher efficiency to the separator by reducing the losses due to the leak flux.

IPC 1-7  
**B03C 1/22**; B65G 15/58; H01F 7/02

IPC 8 full level  
**B03C 1/22** (2006.01); **B03C 1/16** (2006.01)

CPC (source: EP US)  
**B03C 1/22** (2013.01 - EP US)

Designated contracting state (EPC)  
FR

DOCDB simple family (publication)  
**WO 7900085 A1 19790222**; AT 362735 B 19810610; AT A536178 A 19801115; BE 869082 R 19781116; CH 625138 A5 19810915; DD 137534 A5 19790912; DE 2735150 A1 19790215; DE 2735150 C2 19851017; DK 369377 A 19790205; EP 0006885 A1 19800123; EP 0006885 B1 19810701; ES 472364 A1 19790401; FI 772477 A 19790205; GB 2021000 A 19791128; GB 2021000 B 19820603; IT 1109977 B 19851223; IT 7826500 A0 19780804; JP S5448380 A 19790416; NL 7808177 A 19790206; NO 772902 L 19790206; PL 208827 A1 19790507; SE 7709181 L 19790205; US 4273646 A 19810616

DOCDB simple family (application)  
**DE 7800010 W 19780707**; AT 536178 A 19780724; BE 189348 A 19780718; CH 330879 A 19780707; DD 20708878 A 19780802; DE 2735150 A 19770804; DK 369377 A 19770819; EP 78900076 A 19780707; ES 472364 A 19780804; FI 772477 A 19770819; GB 7911336 A 19780707; IT 2650078 A 19780804; JP 9446678 A 19780802; NL 7808177 A 19780803; NO 772902 A 19770822; PL 20882778 A 19780803; SE 7709181 A 19770815; US 2465179 A 19790319