

Title (en)

Washbox for separating materials, and a method of separating coal from shale.

Title (de)

Setzmaschine zum Trennen von Material und Verfahren zum Trennen von Kohle und Schiefer.

Title (fr)

Bac à pistonage pour la séparation de matériaux et procédé pour séparer le charbon du schiste.

Publication

EP 0040519 A1 19811125 (EN)

Application

EP 81302159 A 19810515

Priority

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Abstract (en)

A wash-box for separating materials of different densities (e.g. coal and shale) comprises a stratification compartment (8), a perforate grid plate (12) extending across an upper part of the stratification compartment, and means (20, 22) by which water is admitted to the wash-box. The wash-box comprises a compression chamber (10) in underwater communication with the stratification compartment, and pressure applying means (14, 16, 18, 19) operative alternately to pressurise and de-pressurise the compression chamber (10), to cause repeated rising and falling of movement of water in the stratification compartment, to stratify raw material on the grid plate (12). The wash-box comprises a control device (24), comprising a pressure transducer (26) operative to measure the pressure pertaining in the compression chamber (10), in particular the average pressure pertaining in the compression chamber over a complete cycle of rising and falling movement of the water in the stratification compartment, and to produce a control signal dependent upon such measurement. The control signal is compared with a preset value, and the difference between the control signal and said preset value is utilised to determine the rate of admission of water to the wash-box, by actuation of a valve (22).

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IPC 8 full level

B03B 5/24 (2006.01)

CPC (source: EP)

B03B 5/24 (2013.01)

Citation (search report)

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