

Title (en)
Electrode binder.

Title (de)
Elektrodenbindemittel.

Title (fr)
Liant d'électrode.

Publication
EP 0215192 A1 19870325 (DE)

Application
EP 86107033 A 19860523

Priority
DE 3533106 A 19850917

Abstract (en)
1. The use of an electrode binder of coal tar with a softening point (Kraemer-Sarnow) of from 90 to 105 degrees C, a content of quinoline-insolubles (QI) of from 0.5 to 5% by weight, from 25 to 35% by weight of beta-resins, a content of ash formers of less than 0.2% by weight, preferably less than 0.1% by weight, and an Na content of less than 50 ppm, preferably less than 20 ppm, obtainable by the filtration of a coaltar pitch which is mixed with a 1 - to 2.5-fold quantity of an inorganic or organic filter aid, relative to the QI content of the pitch, by means of filter cartridges with a pore size of from 50 to 100 mu m at a temperature of from 250 to 300 degrees C at a pressure of up to 8 bar and where appropriate by distilling off oils from the filtered pitch in order to fix the softening point, as a binder in the manufacture of anodes with reduced burn-off for the aluminium industry, in particular in the manufacture of previously burned block anodes with an addition of up to 30% by weight of anode residues, relative to the solid-material portion of the anode material, with an Na content of more than 1500 ppm.

Abstract (de)
Das Elektrodenbindemittel für die Herstellung von Anoden mit vermindertem Abbrand für die Aluminiumgewinnung kann durch Filtration erhalten werden. Es hat einen QI-Gehalt von 0,5 bis 5 Gew.-%, 25 - 35 Gew.-% β -Harze und einen Na-Gehalt von vorzugsweise weniger als 20 ppm. Trotz der geringeren scheinbaren Dichte entsprechen der spezifische elektrische Widerstand und die Festigkeit den Werten bei bekannten Anoden. Die Abbrandverluste liegen auch bei Anoden mit rezirkulierten, Na-reichen Anodenresten um 3 Gew.-%, bezogen auf die Anodenmasse, niedriger als bei bekannten Anoden.

IPC 1-7
C10C 1/00

IPC 8 full level
C10C 1/00 (2006.01)

CPC (source: EP)
C10C 1/00 (2013.01)

Citation (search report)
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• [A] FR 2380807 A1 19780915 - BERGWERKSVERBAND GMBH [DE]
• [A] EP 0116956 A2 19840829 - STILL CARL GMBH CO KG [DE], et al
• [A] EP 0034305 A2 19810826 - BERGWERKSVERBAND GMBH [DE]
• [A] US 4436615 A 19840313 - BOODMAN NORMAN S [US], et al

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CN107883897A; AT395316B

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CH DE FR GB LI NL

DOCDB simple family (publication)
EP 0215192 A1 19870325; EP 0215192 B1 19890816; DE 3533106 A1 19870326; DE 3665071 D1 19890921; DK 163880 B 19920413; DK 163880 C 19920914; DK 443386 A 19870318; DK 443386 D0 19860916; NO 170813 B 19920831; NO 170813 C 19921209; NO 863700 D0 19860916; NO 863700 L 19870318

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