

Title (en)

A PROCESS FOR AGGLOMERATING MINERAL ORE CONCENTRATE UTILIZING EMULSIONS OF POLYMER, BINDERS OR DRY POLYMER BINDERS

Publication

EP 0203855 B1 19911121 (EN)

Application

EP 86401065 A 19860520

Priority

US 73623785 A 19850521

Abstract (en)

[origin: EP0203855A2] This invention is a method for agglomerating mineral ore concentrate comprising the commingling of mineral ore concentrate with a binding amount of a water soluble, high molecular weight polymer. The selected polymer is applied to the mineral ore concentrate either (1) dispersed in a water-in-oil emulsion or (2) as a dry powder. The most preferred polymers are water soluble poly(acrylamide) based polymers.

IPC 1-7

C22B 1/16; C22B 1/244

IPC 8 full level

C22B 1/24 (2006.01); **C22B 1/244** (2006.01)

CPC (source: EP)

C22B 1/2406 (2013.01); **C22B 1/2413** (2013.01); **C22B 1/244** (2013.01)

Citation (examination)

- EP 0225171 A2 19870610 - ALLIED COLLOIDS LTD [GB]
- CA 533975 A 19561204 - AMERICAN CYANAMID CO
- GB 1276022 A 19720601 - INT MINERALS & CHEM CORP [US]
- US 3893947 A 19750708 - YOUNG DEAN ARTHUR
- SU 901313 A1 19820130 - BELGORODSKIY NI PI OBOGASHCHEN [SU]
- Kramer et al., "Pelletizing Iron Ore With Organic Additives", 29th Annual Mining Symposium (1968), pages 145-151
- E.Yu. Pozhidayeva et al. "Selection of a Binding Additive for the Manufacture of Pellets", Izvestiya Vuz Ferrous Metallurgy, 2, pages 13-15 and English translation
- Bales et al. "Technology for Pelletizing with a Multicomponent Binder", Gorn Zh(4), 52-53 and English translation
- J.A. Clum et al. "Possible Binders For Pelletizing Of Magnetic Taconite Concentrates", Mining Engineering 30(1), page 53

Cited by

US4919711A; US6071325A; EP0296068A3; US5698007A; EP0288150A1; EP0413603A1; EP0225171A3; EP0541181A1; EP0297553A1; US4863512A; AU610901B2; US11072840B2; WO2017037207A1; US6497746B1; US9464338B2

Designated contracting state (EPC)

FR GB SE

DOCDB simple family (publication)

EP 0203855 A2 19861203; EP 0203855 A3 19881109; EP 0203855 B1 19911121; AR 244745 A1 19931130; AU 5758486 A 19861127; AU 598733 B2 19900705; CA 1332514 C 19941018; SU 1538902 A3 19900123; ZA 863797 B 19870128; ZA 863798 B 19870128

DOCDB simple family (application)

EP 86401065 A 19860520; AR 30402986 A 19860521; AU 5758486 A 19860520; CA 509055 A 19860513; SU 4027643 A 19860521; ZA 863797 A 19860521; ZA 863798 A 19860521