

Title (en)

PROCESS FOR OBTAINING LARGE GRANULE STARCH PROTECTIVE MATERIAL FOR PRESSURE SENSITIVE MICROENCAPSULATED COATINGS

Publication

EP 0000820 B1 19820331 (EN)

Application

EP 78300210 A 19780728

Priority

US 82201377 A 19770804

Abstract (en)

[origin: EP0000820A1] Production of a large granule starch protective material for pressure sensitive microencapsulated coatings, particularly in carbonless copy duplicating paper. <??>An aqueous slurry of wheat barley or rye starch is fed to a first hydrocyclone, providing a partial separation of the granules. The overflow and underflow of this hydrocyclone are further separated in a second and third hydrocyclone, respectively. The underflow and overflow, respectively, of these are recirculated to the first hydrocyclone feed stream. The underflow stream leaving the third hydrocyclone contains 40% or more of the feed starch (dry basis) with a particle size distribution in which about 38% of the particles range from 20 to 32 microns and about 70% of the particles range from 16 to 32 microns. <??>The best balance of the system, and the highest yield of large granule product, is obtained when the particle size distribution of the recirculation streams matches that of the feed stream. <??>The large granule cereal starch product collected from the underflow of the second hydrocyclone may be further upgraded in average particle size by blending a minor amount of a large granule starch therewith.

IPC 1-7

C13L 1/00; **C08B 31/00**

IPC 8 full level

B01J 13/02 (2006.01); **B41M 5/124** (2006.01); **B41M 5/132** (2006.01); **C08B 30/02** (2006.01); **C08B 30/04** (2006.01)

CPC (source: EP US)

B41M 5/1243 (2013.01 - EP US); **C08B 30/04** (2013.01 - EP US)

Citation (examination)

DIE STAERKE, 10, 371-382 (1963) Page 371, right-hand column, lines 1-5 and figure 1k,n

Cited by

US2019112679A1

Designated contracting state (EPC)

BE DE FR GB LU NL

DOCDB simple family (publication)

EP 0000820 A1 19790221; **EP 0000820 B1 19820331**; AU 3862278 A 19800207; AU 519106 B2 19811105; CA 1129816 A 19820817; DE 2861708 D1 19820506; IT 1106617 B 19851111; IT 7850574 A0 19780802; JP S5429206 A 19790305; JP S6346081 B2 19880913; MX 155990 A 19880613; MX 165061 B 19921020; NZ 187976 A 19801219; US 4141747 A 19790227

DOCDB simple family (application)

EP 78300210 A 19780728; AU 3862278 A 19780803; CA 306836 A 19780705; DE 2861708 T 19780728; IT 5057478 A 19780802; JP 9501678 A 19780803; MX 17430178 A 19780725; MX 2690386 A 19860513; NZ 18797678 A 19780726; US 82201377 A 19770804