

Title (en)

MANUFACTURE OF SOFTENED CELLULOSE FIBER-BASED PRODUCTS

Title (de)

HERSTELLUNG VON WEICHEN PRODUKTEN AUS ZELLSTOFFFASERN

Title (fr)

REALISATION DE PRODUITS A BASE DE FIBRES CELLULOSIQUES ADOUCIES

Publication

**EP 0882157 A1 19981209 (EN)**

Application

**EP 97906919 A 19970218**

Priority

- US 9702423 W 19970218
- US 60481896 A 19960223

Abstract (en)

[origin: WO9731153A1] A process and composition for softening cellulose fibers for the manufacture of softened cellulose fiber-based products such as paper towels, facial tissue, sanitary tissues, toilet tissues, non-woven fabrics and fluff pulp, and the products made by said process. The process maintains a high level of wet strength in the finished paper product containing suitable wet strength additives, as measured by the wet tensile strength of the dry web. The process includes treating cellulose fiber with chemical softening composition comprising phospholipids, a non-ionic surfactant and, optionally, a lubricating additive. The composition includes a phospholipid, a non-ionic surfactant and, optionally, a lubricant. The products include softened cellulose fiber-based material including a composition which includes a phospholipid, a non-ionic surfactant and, optionally, a lubricant. The phospholipids include phosphatidylcholine (lecithin), hydroxylated phosphatidylcholine, phosphatidylethanolamine, hydroxylated phosphatidylethanolamine, phosphatidylserine, hydroxylated phosphatidylserine, phosphatidylinositol and hydroxylated phosphatidylinositol.

IPC 1-7

**D21H 21/24; D21H 17/10; D06M 13/292; D06M 13/44; D06M 13/165; D06M 15/53**

IPC 8 full level

**D06M 13/144** (2006.01); **D06M 13/165** (2006.01); **D06M 13/224** (2006.01); **D06M 13/282** (2006.01); **D06M 13/292** (2006.01);  
**D06M 13/342** (2006.01); **D06M 13/44** (2006.01); **D06M 13/453** (2006.01); **D06M 15/53** (2006.01); **D21H 17/10** (2006.01); **D21H 21/24** (2006.01)

CPC (source: EP)

**D06M 7/00** (2013.01); **D06M 13/144** (2013.01); **D06M 13/165** (2013.01); **D06M 13/224** (2013.01); **D06M 13/292** (2013.01);  
**D06M 13/342** (2013.01); **D06M 13/453** (2013.01); **D06M 15/53** (2013.01); **D21H 17/10** (2013.01); **D21H 21/24** (2013.01); **D06M 2200/40** (2013.01)

Citation (search report)

See references of WO 9731153A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**WO 9731153 A1 19970828**; AU 2274497 A 19970910; EP 0882157 A1 19981209

DOCDB simple family (application)

**US 9702423 W 19970218**; AU 2274497 A 19970218; EP 97906919 A 19970218