



US 20170167078A1

(19) **United States**

(12) **Patent Application Publication**

Åkerblom

(10) **Pub. No.: US 2017/0167078 A1**

(43) **Pub. Date: Jun. 15, 2017**

(54) **A REFINER APPARATUS AND A METHOD FOR REFINING CELLULOSIC MATERIAL**

B02C 7/14 (2006.01)

D21D 1/30 (2006.01)

B02C 23/02 (2006.01)

(71) Applicant: **DAPROX AB**, Kungens Kurva (SE)

(52) **U.S. Cl.**

(72) Inventor: **Bengt Åkerblom**, Vårby (SE)

CPC *D21B 1/36* (2013.01); *D21D 1/30*

(2013.01); *B02C 23/02* (2013.01); *B02C 7/14*

(2013.01); *B02C 7/12* (2013.01)

(21) Appl. No.: **15/115,624**

(22) PCT Filed: **Feb. 6, 2015**

(57)

ABSTRACT

(86) PCT No.: **PCT/SE2015/050134**

§ 371 (c)(1),

(2) Date: **Jul. 29, 2016**

The present invention regards a refiner plate segment (1) for a disc-type refiner apparatus (30), adapted to grind a saturated cellulosic material (M) in a refining gap (17) defined by opposed discs (20) during use of the apparatus (30), the material being moved from a refiner inlet opening (21) towards an outer edge (7) of the segment (1). The outer edge (7) of the segment (1) comprises a barrier arrangement (15) to increase the pressure in the refining gap (17) for retaining the liquid phase out to said outer edge (7). The present invention also regards a method of refining a saturated cellulosic material (M) in a refining gap (17) defined by two opposed discs (20) of a disc arrangement.

(30) **Foreign Application Priority Data**

Feb. 11, 2014 (SE) 1450143-1

Publication Classification

(51) **Int. Cl.**

D21B 1/36 (2006.01)

B02C 7/12 (2006.01)

