

Title (en)  
REFINER FOR THE TREATMENT OF FIBROUS MATERIAL

Publication  
**EP 0256972 A3 19890510 (DE)**

Application  
**EP 87730093 A 19870813**

Priority  
DE 3628195 A 19860820

Abstract (en)  
[origin: US4813621A] The grinding discs of a refiner driven by an electric motor carry on the end faces facing each other material-grinding barriers or cutters which are arranged in groups in sectors and extend parallel to each other. To reduce the torsional excitation of the rotor shaft of the electric motor occurring during the operation of the refiner as far as possible, the sectors have irregular pitch or different sector angles along the circumference of the grinding discs.

IPC 1-7  
**B02C 7/12**; **D21D 1/30**

IPC 8 full level  
**B02C 7/12** (2006.01); **D21D 1/30** (2006.01)

CPC (source: EP US)  
**B02C 7/12** (2013.01 - EP US); **D21D 1/306** (2013.01 - EP US)

Citation (search report)  
• [A] US 3910511 A 19751007 - LEIDER PHILIP J, et al  
• [AD] DE 2724161 A1 19781130 - VYZK USTAV PAPIERU CELULOZY  
• [A] US 4351489 A 19820928 - LAPTEV LEV N, et al

Cited by  
EP1574615A1; WO9004673A1

Designated contracting state (EPC)  
AT DE SE

DOCDB simple family (publication)  
**EP 0256972 A2 19880224**; **EP 0256972 A3 19890510**; **EP 0256972 B1 19901227**; AT E59313 T1 19910115; DE 3628195 A1 19880225; DE 3767078 D1 19910207; FI 84189 B 19910715; FI 84189 C 19911025; FI 873582 A0 19870819; FI 873582 A 19880221; US 4813621 A 19890321

DOCDB simple family (application)  
**EP 87730093 A 19870813**; AT 87730093 T 19870813; DE 3628195 A 19860820; DE 3767078 T 19870813; FI 873582 A 19870819; US 8492787 A 19870812