

## Title (en)

Wet-end and process to form a multilayer paper web

## Title (de)

Siebpartie und Verfahren zum Formen einer mehrlagigen Faserstoffbahn

## Title (fr)

Partie humide et procédé pour former une bande de papier multi-couches

## Publication

**EP 0851058 A3 19990519 (DE)**

## Application

**EP 97203859 A 19971209**

## Priority

DE 19651493 A 19961211

## Abstract (en)

[origin: US6159341A] A wire section for forming a multi-ply fiber web. The wire section includes a first belt which advances a first fiber ply toward a couch roll defining a combining section. A twin-wire zone of the wire section includes first and second wires between which a second fiber ply is initially formed in a gap former. The second wire separates from the first wire and then the first wire supporting the second fiber ply meets the first belt supporting the first fiber ply at the couch roll of the combining section to form the multi-ply fiber web. The twin-wire part is arranged upstream of the combining section along the running direction of the first belt. The second fiber ply runs on the first wire into the combining section at an angle less than 90 DEG with respect to the belt entering the combining section. The path of the wires from the forming roll to the combining section is disclosed. A suction box or arrangement holds the second fiber ply to the first wire when the first and second wires separate. Dewatering foils press on the wires moving through the twin-wire zone.

## IPC 1-7

**D21F 1/00**; **D21F 11/04**

## IPC 8 full level

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## CPC (source: EP US)

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## Citation (search report)

- [X] WO 9206242 A1 19920416 - ESCHER WYSS GMBH [DE]
- [AD] DE 4402273 A1 19940616 - VOITH GMBH J M [DE]
- [A] FR 2388936 A1 19781124 - VALMET OY [FI]

## Cited by

DE102014210883A1; US10760220B2; US6375799B1; WO0144569A1; DE102011083308A1; WO2013041341A1; DE102009000696A1; WO2010089182A1; EP4202117A1

## Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

## DOCDB simple family (publication)

**US 6159341 A 20001212**; AT E234386 T1 20030315; CA 2224429 A1 19980611; CA 2224429 C 20060627; DE 19651493 A1 19980618; DE 59709493 D1 20030417; EP 0851058 A2 19980701; EP 0851058 A3 19990519; EP 0851058 B1 20030312; JP 2008255561 A 20081023; JP 4183295 B2 20081119; JP 4262773 B2 20090513; JP H10183487 A 19980714

## DOCDB simple family (application)

**US 98798197 A 19971210**; AT 97203859 T 19971209; CA 2224429 A 19971210; DE 19651493 A 19961211; DE 59709493 T 19971209; EP 97203859 A 19971209; JP 2008147535 A 20080605; JP 34162997 A 19971211