

Title (en)

Drying section and convection dryer for such a drying section

Title (de)

Trockenpartie sowie Konvektionstrockner für eine solche Trockenpartie

Title (fr)

Section de séchage et sécheur à convection pour une telle section de séchage

Publication

**EP 0989233 A3 20001227 (DE)**

Application

**EP 99113191 A 19990708**

Priority

DE 19841767 A 19980911

Abstract (en)

[origin: EP0989233A2] The web drying section, at a papermaking or cardboard production machine, has at least one convection drier (10). It has at least one drying section (18-24) where the web (12) moves between two permeable fourdriniers (26-34) for hot air and/or hot steam to pass through it from one or both sides. The convection drier (10) has at least one straight or slightly curved drying section (18-24) on the direction (L) of web travel. It can have at least two drying sections (18-22), over each other or in succession. At least one drying section (18-24) is formed between two drying or jet hoods (36,36'-42,42'). The hoods have a steam or air suction extraction. The web (12) is enclosed at the sides, at least partially by the convection drier (10). The heaters at the drying sections (18-24) are controlled separately, at least partially, to set the heating levels. The convection drier (10) has at least one drying section (18-24) divided into zones across the direction (L) of web (12) travel. The web (12) has an enclosed travel path through the convection drier (10). The web deflection between the drying sections (18-24) is through suction rollers (44-50), which take the web (12) from the preceding fourdriniers (26,28,32,30). The hot air and/or hot steam applied to the web (12) in at least one drying section (18-24) is at a temp. of 150-450 degrees C, and especially at 200-400 degrees C, and at a flow speed of 60-120 m/s, especially 100 m/s. The convection drier (10) is located in front of a drying group of cylinders in one or two rows. On reaching the first drying cylinder (14), the web (12) has been dried to a dry content level of 55-65%. The convection drier (10) is placed after one or more cylinders or at least one web guide roller.

IPC 1-7

**D21F 5/18**

IPC 8 full level

**D21F 5/18** (2006.01)

CPC (source: EP US)

**D21F 5/18** (2013.01 - EP US); **D21F 5/185** (2013.01 - EP US)

Citation (search report)

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**DE 19841767 A1 20000316**; DE 59910817 D1 20041118; EP 0989233 A2 20000329; EP 0989233 A3 20001227; EP 0989233 B1 20041013; US 6237248 B1 20010529

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