Title (en)

Method and device for blowing a gas onto a moving strip

Title (de)

Verfahren und Vorrichtung zum Blasen von Gas auf ein laufendes Band

Title (fr)

Procédé et dispositif de soufflage de gaz sur une bande en défilement.

Publication

EP 2100673 B1 20110112 (FR)

Application

EP 08300145 A 20080314

Priority

EP 08300145 A 20080314

Abstract (en)

[origin: EP2100673A1] The process comprises projecting gas jets or water/gas mixture jets on each side of the strip, and distributing the impacts of gas or water/gas mixture jets on each surface of the strip in nodes of a two-dimensional network. The jet impacts on one side (A) of the strip, and does not impact on the other side (B) of the strip. The gas or water/gas jets are obtained from tubular nozzles (23, 33) fed by a distribution box (21). The tubular nozzles extend away from the distribution box so as to leave a free space for gas or water/gas circulation. The process comprises projecting gas jets or water/gas mixture jets on each side of the strip, and distributing the impacts of gas or water/gas mixture jets on each surface of the strip in nodes of a two-dimensional network. The jet impacts on one side (A) of the strip, and does not impact on the other side (B) of the strip. The gas or water/gas jets are obtained from tubular nozzles (23, 33) fed by a distribution box (21). The tubular nozzles extend away from the distribution box so as to leave a free space for gas or water/gas circulation that is parallel or perpendicular to the longitudinal direction of the strip. The axis of gas or water/gas mixture jet forms a perpendicular angle with the strip surface. The two-dimensional networks for distribution of jet impacting on each side of the strip are hexagonal, periodical, same type and same pace. The impacts of jets on the same face of the strip distributed in nodes of two-dimensional network form a polygonal mesh complex having 3-20 sides and periodicity of 1 pace across the strip and 3-20 paces in the longitudinal direction of the strip. The network corresponding to one side and another side are spaced apart from each other with a gap of of pace and 3/4 of pace. An independent claim is included for a device for blowing a cool or hot gas or a water/gas mixture on a rolling strip to act on its temperature for cooling or heating.

IPC 8 full level

B21B 45/02 (2006.01); **C21D 9/52** (2006.01)

CPC (source: EP KR US)

B21B 45/004 (2013.01 - EP US); **B21B 45/02** (2013.01 - KR); **B21B 45/0209** (2013.01 - EP US); **B21B 45/0218** (2013.01 - EP US); **C21D 1/667** (2013.01 - EP KR US); **C21D 9/52** (2013.01 - EP US); **C21D 9/573** (2013.01 - EP KR US); **F24H 9/00** (2013.01 - US); B21B 15/005 (2013.01 - EP US); B21B 45/0215 (2013.01 - EP US); B21B 45/0233 (2013.01 - EP US); B21B 2045/0212 (2013.01 - EP US)

Cited by

EP2495343A4; US2015140225A1; US10011897B2; EP3663417A4; US11131004B2; US11286539B2; WO2017114682A1; WO2022053927A1; WO2022053847A1; WO2019201622A1; EP3663417B1

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