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.

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Application

EP 08300145 A 20080314

Priority

EP 08300145 A 20080314

Abstract (en)

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.

Abstract (fr)

La présente invention concerne un procédé d'action sur la température d'une bande (4) en défilement par soufflage de gaz ou d'un mélange eau/gaz selon lequel on projette sur chaque face de la bande une pluralité de jets de gaz ou d'un mélange eau/gaz s'étendant en direction de la surface de la bande et disposés de telle sorte que les impacts (24, 34) des jets de gaz ou d'un mélange eau/gaz sur chaque surface de la bande sont répartis aux noeuds d'un réseau bi-dimensionnel. Les impacts (24) des jets sur une face (A) ne sont pas en regard des impacts (34) des jets sur l'autre face (B), et les jets de gaz ou d'un mélange eau/gaz sont issus de buses tubulaires (23, 33) alimentées par au moins un caisson de répartition (21, 31) et s'étendant à distance du caisson de répartition de façon à laisser libre un espace de circulation du gaz ou du mélange eau/gaz en retour parallèlement au sens longitudinal de la bande et perpendiculairement au sens longitudinal de la bande.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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