

Title (en)

Method, apparatus and forming roll for forming material with a bidirectional periodicity.

Title (de)

Verfahren, Vorrichtung und Formrolle zum Formen von Material mit Zweirichtungsperiodizität.

Title (fr)

Procédé, appareil et rouleau de formage pour travailler du matériau avec une périodicité bidirectionnelle.

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Application

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Priority

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Abstract (en)

A sheet material (6) is passed between a pair of forming rolls (7, 8) having working surfaces with forming teeth of a wave-shape which has a periodicity within two mutually perpendicular sections. The rolls are constructed from elements in the form of helical spur gears (3) keyed on a common shaft (5) and may be interspersed with straight spur gears (4). This permits the continuous formation of a structural material having a bidirectional periodicity, that is a material (1) having a wave-form construction within each of two mutually perpendicular sections. The pitch of the wave-form can be altered by changing the depth of action between the rolls. Such bidirectional material can have a structural performance comparable with that of a honeycomb sandwich material and has many other uses.

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