Title (en)
DISTORTION CALCULATION METHOD AND ROLLING SYSTEM

Title (de)
VERZERRUNGSBERECHNUNGSVERFAHREN UND WALZANLAGE

Title (fr)
PROCÉDÉ DE CALCUL DE DÉFORMATION ET SYSTÈME DE LAMINAGE

Publication
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Application
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Priority
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Abstract (en)
A distortion computation method, the method including: detecting a profile of a steel sheet rolled by a rolling mill; computing from the detected profile second distortion indicating distortion appearing in an undulation on a surface of the steel sheet; determining third distortion from correlation between a threshold value of the third distortion indicating distortion corresponding to internal stress of the rolled steel sheet and a wavelength of a rolling-direction component of a profile determined from the detected profile, and the wavelength of the rolling-direction component of the detected profile, wherein the correlation is computed by buckling analysis from a boundary condition determined from the detected profile, thickness of the steel sheet, width of the steel sheet, tensile strength of the steel sheet, and distribution pattern of the third distortion; and adding the second distortion to the third distortion so as to compute first distortion indicating difference between distortion corresponding to stress applied to the steel sheet and desired distortion.

IPC 8 full level
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CPC (source: EP)
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Cited by
US10307806B2; US11281818B2; WO2020072864A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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EP 12877083 A 20121003; CN 201280025252 A 20121003; JP 2012075706 W 20121003; JP 2013505018 A 20121003; KR 20147009650 A 20121003