

Title (en)
AUTOMATED METHOD AND DEVICE FOR THE NON-CUTTING SHAPING OF A BODY

Title (de)
AUTOMATISIERTES VERFAHREN UND VORRICHTUNG ZUM SPANLOSEN UMFORMEN EINES KÖRPERS

Title (fr)
PROCEDE AUTOMATISE ET DISPOSITIF POUR FORMER UN CORPS SANS ENLEVEMENT DE COPEAUX

Publication
EP 1173299 A1 20020123 (DE)

Application
EP 00922653 A 20000419

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Abstract (en)
[origin: US2002062161A1] An automated method of shaping a thin side wall of a body without cutting includes the steps of predetermining a desired geometry of the thin side wall of the body in an electronic data model, automated determining the actual geometry of the thin side wall of the body and storing it in an electronic data model, calculating the difference between the desired geometry and the actual geometry of the thin side wall of the body, determining local deformation zones in which the difference between the desired geometry and the actual geometry of the thin side wall of the body exceeds a defined predetermined limiting value, calculating an energy profile to be locally applied in the local deformation zones by numerical methods, applying defined pressure to one side of the thin side wall of the body, and defined, automated increasing the deformability of the thin side wall of the body in the local deformation zones by a defined application of energy in the local deformation zones in accordance with the calculated local energy profile, the thin side wall of the body in the local deformation zones being deformed due to its increased deformability and the one-side application of pressure. An apparatus serves to conduct the method.

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IPC 8 full level
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