

Title (en)

TOOL AND METHOD FOR THE JOINING SHEET MATERIAL

Title (de)

WALZWERKZEUG UND POSITIONSDRUCKVERFAHREN ZUR VERWENDUNG BEIM FORMEN UND VERBINDEN VON FLÄCHIGEM MATERIAL

Title (fr)

ROULEAU ET PROC D DE SUPERPOSITION PAR PRESSION UTILIS S POUR FORMER ET RELIER DES MAT RIAUX EN FEUILLE

Publication

**EP 1689562 A2 20060816 (EN)**

Application

**EP 04811675 A 20041119**

Priority

- US 2004038993 W 20041119
- US 52396103 P 20031121
- US 52408003 P 20031121

Abstract (en)

[origin: WO2005060493A2] An apparatus and method for forming and joining a first sheet material (A) located in a nest (30) to a second sheet material (B) positioned on top of the first sheet material. The apparatus includes a positional pressure roller tool or positional pressure variance unit (50) for performing the forming and joining operations. The PPVU (50) may include both a main roller (58) and a touch-up roller (60). The PPVU (50) is operatively associated with a programmable positioning apparatus in the form of a robotic arm (52) and a machine cell (10) whereby the position of the robotic arm (52) relative to the nest (30) dictates the applied pressure at the interface between the roller (72) and the nest (30).

IPC 8 full level

**B21D 39/02** (2006.01)

CPC (source: EP)

**B21D 39/021** (2013.01); **B21D 39/023** (2013.01); **B25J 9/1679** (2013.01); **B25J 15/0019** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2005060493 A2 20050707; WO 2005060493 A3 20050825;** CA 2545684 A1 20050707; CA 2545684 C 20120320; EP 1689562 A2 20060816;  
EP 1689562 A4 20110105

DOCDB simple family (application)

**US 2004038993 W 20041119;** CA 2545684 A 20041119; EP 04811675 A 20041119