

Title (en)

Machine for automatically roughing the cement margin of a footwear upper assembly.

Title (de)

Automatische Maschine zum Aufrauen des Schaftkleberandes einer Schuheinheit.

Title (fr)

Machine automatique pour rendre rugueux les bords de collage de l'empeigne d'une ébauche de chaussure.

Publication

EP 0250214 A2 19871223 (EN)

Application

EP 87305351 A 19870617

Priority

US 87656186 A 19860620

Abstract (en)

Apparatus (and method) for automatically roughing the cement margin (103) of a shoe or other footwear assembly (104), which footwear upper assembly includes an upper mounted on a last and an inner sole disposed upon the bottom of the last and connected to the upper. The apparatus (i.e. a roughing machine) typically includes a disc-shaped wire wheel (or other roughing tool) (41) positioned with the plane of the brush approximately perpendicular to the cement margin at the region of contact between the two. The roughing machine includes a mechanism (1) to receive the upper assembly and provide some combination of movements between the upper assembly and the periphery of the wire wheel to achieve a constant region (or area) of contact between the two as the cement margin moves with respect to the wire wheel in the course of roughing. The wire wheel is supported at one end of an intermediately pivoted action arm (10); a load measuring beam (12) is connected to the other end of the action arm to provide electrical signals proportional to or representative of the pressure force between the wire wheel and the cement margin at the region of contact. A servo-valve actuated air cylinder (13) drives the action arm to load the wire wheel upon the cement margin, the amount of loading being closely controllable (e.g. $\pm 2.25 \times 10^{-1}$ kgf [about one-half \pm lb.f]) in response to the electrical signals which are connected as input to the servo-valve as control signals.

IPC 1-7

A43D 37/00

IPC 8 full level

C14B 1/44 (2006.01); **A43D 37/00** (2006.01); **C14B 1/46** (2006.01)

CPC (source: EP)

A43D 37/00 (2013.01)

Cited by

EP0336632A3; EP1472946A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0250214 A2 19871223; **EP 0250214 A3 19891115**; BR 8703026 A 19880308; JP S6351801 A 19880304

DOCDB simple family (application)

EP 87305351 A 19870617; BR 8703026 A 19870616; JP 14420987 A 19870611