

Title (en)
ACTIVE RECONFIGURABLE STRETCH FORMING

Title (de)
AKTIVES, REKONFIGURIERBARES STRECKFORMEN

Title (fr)
FORMAGE ACTIF RECONFIGURABLE PAR ETIRAGE

Publication
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Application
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Priority

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Abstract (en)
[origin: WO2007085041A1] This invention concerns an active reconfigurable stretch forming tool, and in another aspect the invention is a method of stretch forming. The tool comprises an array of extensible shape forming elements which are driven in extension to produce the same force per unit area across a workpiece during shape forming. An array of limit switches are located in front of the array of shape forming elements, such that each shape forming element is driven in extension towards a respective limit switch during shape forming. In use, each limit switch is activated by the workpiece as it is shaped and each switch, upon activation, prevents further extension of the respective driven element. The tool and method are useful in the forming of three dimensional shapes in solid sheet metal or mesh, to produce panels for reflector antennas.

IPC 8 full level

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EP 1976651 A1 20081008; EP 1976651 A4 20100512; EP 1976651 B1 20110831; ES 2373749 T3 20120208; GB 0812950 D0 20080820;
GB 2447204 A 20080903; GB 2447204 B 20110309; HK 1173106 A1 20130510; US 2010043511 A1 20100225; US 2015068261 A1 20150312;
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US 16231707 A 20070123; US 201414484949 A 20140912; ZA 200806368 A 20080722