

Title (en)  
METHOD OF WEAVING A THREE-DimensionALLY SHAPED FABRIC ZONE

Title (de)  
VERFAHREN ZUM WEBEN EINER DREI-Dimensional GEFORMTEN GEWEBEZONE

Title (fr)  
PROCEDE DE TISSAGE D'UNE ZONE DE TISSU FACONNEE A TROIS DIMENSIONS

Publication  
**EP 0819188 B1 20000621 (DE)**

Application  
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Abstract (en)  
[origin: US6000442A] PCT No. PCT/EP96/01397 Sec. 371 Date Dec. 15, 1997 Sec. 102(e) Date Dec. 15, 1997 PCT Filed Mar. 29, 1996 PCT Pub. No. WO96/31643 PCT Pub. Date Oct. 10, 1996A process and apparatus for weaving a fabric with a three dimensional bulging zone, which is formed by increasing the density of the crossing points of the warp and weft threads so as to naturally impart a bulging zone in the fabric. The density is changed by changing the number of threads and/or changing the weave pattern. The lengths of the warp threads can also be increased in the bulging zone. In a preferred embodiment, the threads include a material which is settable by thermal or chemical treatment, and such that upon being set a three dimensional rigid matrix is formed which includes the non-settable threads as a reinforcement. The apparatus for carrying out the process takes the form of a loom having the capability of individually drawing off selected lengths of the warp threads from a warp supply, and a jacquard head for forming the weaving sheds and which has a control for changing the number of threads woven and/or the weave pattern.

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