

Title (en)  
COLLECTOR MANUFACTURING PROCESS

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES KOMMUTATORS

Title (fr)  
PROCEDE DE FABRICATION DE COLLECTEURS

Publication  
**EP 0821838 B1 19990324 (DE)**

Application  
**EP 96914933 A 19960417**

Priority  
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Abstract (en)  
[origin: US6108898A] PCT No. PCT/EP96/01607 Sec. 371 Date Oct. 21, 1997 Sec. 102(e) Date Oct. 21, 1997 PCT Filed Apr. 17, 1996 PCT Pub. No. WO96/33534 PCT Pub. Date Oct. 24, 1996A process for manufacturing collectors, in particular flat collectors for electric machines. The individual connection elements (2) are at first directly shaped by crowding in a substantially non-machined raw conductive material (1) with their final contour and size and in their final ductile state. For that purpose, a warm forming process is used. The raw material (1) is warmed before the connection elements (2) are formed so that it does not significantly consolidate while the connection elements (2) are formed by crowding, and forming is then carried out in the warm state. In addition, a pot-shaped blank (3) may be shaped, preferably in a cold forming step, for example with inner shaped anchoring elements (6) for an insulating lining. Recesses (9) may be shaped by crowding on the cylindrical envelope (4) of the pot-shaped blank (3). These recesses are associated to the segment divisions and extend almost down to the bottom (5) of the pot-shaped blank (3). In a subsequent forming step, outer anchoring elements (13) are formed on the cylindrical envelope (4), if required a central opening (14) is cut out in the bottom (5) and the previously shaped inner anchoring elements (6) are bent outwards in the radial direction.

IPC 1-7  
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