

Title (en)  
BAR ASSEMBLY

Title (de)  
STABVERBINDUNG

Title (fr)  
ASSEMBLAGE DE BARRES

Publication  
**EP 1133594 A1 20010919 (DE)**

Application  
**EP 99972703 A 19991124**

Priority  
• DE 19854191 A 19981124  
• EP 9909088 W 19991124

Abstract (en)  
[origin: US6632317B1] The invention concerns a set comprising a plurality of mutually juxtaposed, generally flat, plate-shaped components which are fixedly connected together, and a process for the production thereof. Production is simple and inexpensive to implement and that means also that the entire set can be produced inexpensively and sufficiently accurately in terms of fit. A process according to the invention for connecting together in the longitudinal direction to form a set a plurality of components disposed at a spacing in mutually juxtaposed relationship, in particular needles, whose main planes are disposed transversely with respect to the longitudinal direction, is distinguished in that the individual components are positioned at the correct spacing relative to each other, and at least one bar is inserted in the longitudinal direction into at least one aligned orifice in the components, in particular needles, wherein the outside diameter of the bar is only slightly smaller than the orifice, and the set is glued in the region where the bar passes through the components.</PTEXT>

IPC 1-7  
**D04B 27/24**; **D04B 27/06**

IPC 8 full level  
**D04B 27/06** (2006.01); **D04B 27/24** (2006.01)

CPC (source: EP US)  
**D04B 27/02** (2013.01 - EP US); **D04B 27/06** (2013.01 - EP US)

Citation (search report)  
See references of WO 0031329A1

Cited by  
CN103225164A

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**US 6632317 B1 20031014**; AT E288511 T1 20050215; DE 19854191 A1 20000525; DE 19854191 B4 20080221; DE 59911565 D1 20050310; EP 1133594 A1 20010919; EP 1133594 B1 20050202; ES 2237214 T3 20050716; WO 0031329 A1 20000602

DOCDB simple family (application)  
**US 85611801 A 20010725**; AT 99972703 T 19991124; DE 19854191 A 19981124; DE 59911565 T 19991124; EP 9909088 W 19991124; EP 99972703 A 19991124; ES 99972703 T 19991124