

Title (en)  
DEVICE FOR NEEDLING A WEB OF FIBER

Title (de)  
VORRICHTUNG ZUM VERNADELN EINER FASERBAHN

Title (fr)  
DISPOSITIF D'AIGUILLETAGE D'UNE BANDE FIBREUSE

Publication  
**EP 2250308 B1 20110921 (DE)**

Application  
**EP 09718088 A 20090302**

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Abstract (en)  
[origin: WO2009109553A1] The invention relates to a device for needling a web of fiber, said device comprising at least one driven needle beam. A vertical reciprocal movement of the needle beam is carried out by a vertical drive unit and a superposed horizontal reciprocal movement is carried out by a horizontal drive unit or due to a phase adjustment by the vertical drive unit. A weight balancing device is provided for balancing the inertia forces of the crank mechanisms. In order to be able to balance both vertical and horizontal inertia forces in a simple manner, the weight balancing device is formed by at least one balance weight which is associated with the crank mechanism of the vertical drive unit and which is set-off by an angle in the range of  $<180^\circ$  from an eccentric element of the crank mechanism.

IPC 8 full level  
**D04H 18/00** (2012.01)

CPC (source: EP US)  
**D04H 18/00** (2013.01 - EP US); **D04H 18/02** (2013.01 - EP US)

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