

Title (en)  
Latch needle with resilient latch support

Title (de)  
Zungennadel mit federnder Zungenunterstützung

Title (fr)  
Aiguille à clapet avec suport clapet élastique

Publication  
**EP 1197591 B1 20050629 (DE)**

Application  
**EP 01121221 A 20010905**

Priority  
DE 10051029 A 20001014

Abstract (en)  
[origin: EP1197591A1] The latch needle, with a sprung latch support, has a spring (8) with an initial pressure surface (27) and the latch (6) has a matching initial laying surface (24), which are together when the latch is in the rest position. The spring has a second pressure surface (15), at a gap from the first, and the latch has a second matching laying surface (22) when the latch is at its end position next to the rest position. The latch needle, with a sprung latch support, has an initial spring pressure surface and an initial latch laying surface which are out of contact when the latch is in the end position. The second spring pressure surface and the second latch laying surface are out of contact when the latch is in the rest position. The first laying surface is at a smaller gap from the swing axis (7a) than the second laying surface, and forms a triangle with acute inner angles (W1,W2). The spring pressure surfaces and the latch laying surfaces have dimensions and positions so that a recoil force is generated at the end position which is stronger than the recoil forces in the rest position. The second pressure and laying surfaces come into contact when the latch is between the rest and the end positions. The first laying surface is flat. The latch has a third laying surface (23), to give an additional and stable rest position together with a spaced fourth laying surface (21). The spring has matching pressure surfaces (26,16). The first and third spring pressure surfaces overlap at least partially. The spring is a longitudinal bending spring, and its pressure surfaces are at least twice the thickness, measured longitudinally (L).

IPC 1-7  
**D04B 35/04**

IPC 8 full level  
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CPC (source: EP US)  
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Citation (examination)  
EP 0259563 A2 19880316 - STOLL & CO H [DE]

Cited by  
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