

Title (en)  
Device for changing the upper thread

Title (de)  
Vorrichtung zum Wechseln des Oberfadens

Title (fr)  
Dispositif de changement du fil supérieur

Publication  
**EP 1158083 A3 20020904 (DE)**

Application  
**EP 01109822 A 20010421**

Priority  
DE 10026242 A 20000526

Abstract (en)  
[origin: EP1158083A2] The apparatus to change the upper thread at a sewing machine, and especially a robot, uses a bobbin magazine (1). The robot (2) with its sewing head (15) is mounted at the workstation, which has the thread cutter and thread splicer. The bobbin magazine (1) with the bobbin change unit (12) is fitted close to the robot. The upper thread change system, at a robot sewing machine, has a bobbin magazine where a fixed holder arm is at each bobbin (5), with at least two thread clamps which hold the thread over the bobbin axis. Each bobbin is held in place by a sprung and sliding pin. The bobbin change unit has a bobbin grip on a moving slide, and at least two thread grips. The bobbin grip moves the bobbin from the magazine to the workstation and back. The two thread grips at the bobbin change unit are mounted on a rotating arm. Two controlled thread holders, at the workstation, are on an arm with vertical movement, with cutting scissors under the first thread holder. The thread splicer at the workstation is to one side of the thread movement path, and it can swing into the thread path.

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**D05B 43/00**; **D05B 23/00**; **B65H 67/02**

IPC 8 full level  
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CPC (source: EP)  
**B65H 69/00** (2013.01); **D05B 43/00** (2013.01); **D05C 11/16** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)  
• [A] DE 4126788 C1 19921126  
• [A] US 5104052 A 19920414 - WEY EDMUND [DE], et al  
• [A] US 5269244 A 19931214 - CATALETTO ALESSANDRO [IT]

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CN110983672A; CN111321524A

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**EP 1158083 A2 20011128**; **EP 1158083 A3 20020904**; **EP 1158083 B1 20041215**; DE 10026242 A1 20011129; DE 50104805 D1 20050120; JP 2001340677 A 20011211

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