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(54) Sewing machine embroidery presser and sewing machine

(57) Disclosed is a sewing machine embroidery presser attached to a presser bar, in a sewing machine including a needle bar that has a needle holder for holding a needle and is vertically movable in the height direction, a presser bar vertically movable in the height direction, and a presser lifting lever for vertically moving the presser bar, the sewing machine embroidery presser including: a presser holder attached to a lower portion of the presser bar using a fixture; an operational arm that is attached to the presser holder and moved vertically by the needle bar or the needle holder to vertically move in the height direction; a presser foot that is vertically movably held by the presser holder to move in synchronization with the operational arm, faces a needle plate of the sewing machine, and presses a target workpiece; a presser spring that is provided in the presser holder and has a biasing force for biasing the presser foot toward the needle plate; and a subsidiary lever pivotably provided in the presser holder, the subsidiary lever including a cam surface having a cam profile for vertically moving the operational arm in response to pivoting, a fixing trench that engages with the operational arm to move the presser foot to the presser holder side and temporarily set the presser foot in a first height position raised from the needle plate, and an operating portion operated by the user's finger.

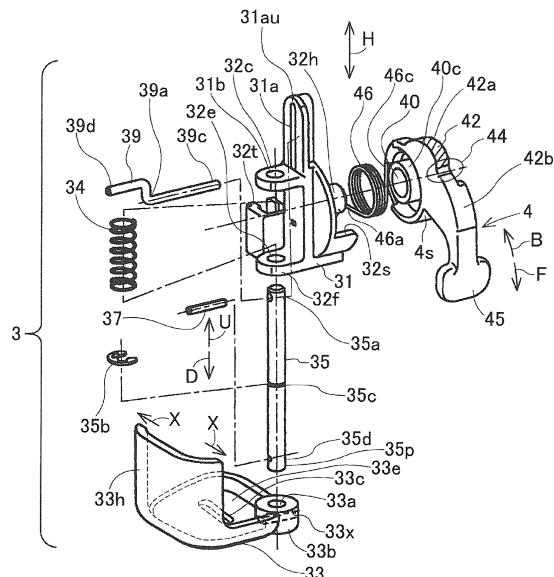


FIG. 3



EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2009/114133 A1 (FUJIHARA SHINYA [JP]) 7 May 2009 (2009-05-07) * paragraph [0025] - paragraph [0055]; figures 1-11 *	1-7	INV. D05B29/12 D05C7/02
A,D	EP 1 705 278 A1 (BROTHER IND LTD [JP]) 27 September 2006 (2006-09-27) * paragraph [0009] - paragraph [0036]; figures 1-4 *	1-7	
A,P	EP 2 390 396 A1 (AISIN SEIKI [JP]) 30 November 2011 (2011-11-30) * paragraph [0045] - paragraph [0074]; figures 1-13 *	1-7	
	-----		TECHNICAL FIELDS SEARCHED (IPC)
			D05B D05C
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
Munich	21 April 2015	Herry-Martin, D	
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ON EUROPEAN PATENT APPLICATION NO.**

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21-04-2015

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2009114133	A1	07-05-2009	JP US	2009112325 A 2009114133 A1		28-05-2009 07-05-2009
EP 1705278	A1	27-09-2006	CN EP JP JP US	1837442 A 1705278 A1 4623423 B2 2006263170 A 2006213409 A1		27-09-2006 27-09-2006 02-02-2011 05-10-2006 28-09-2006
EP 2390396	A1	30-11-2011	CN EP JP JP US	102260967 A 2390396 A1 5574163 B2 2011245110 A 2011290168 A1		30-11-2011 30-11-2011 20-08-2014 08-12-2011 01-12-2011

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