

Title (en)  
Device for monitoring the needle thread

Title (de)  
Vorrichtung zur Überwachung des Oberfadens

Title (fr)  
Dispositif de surveillance du fil supérieur

Publication  
**EP 1882767 B1 20130724 (DE)**

Application  
**EP 07405114 A 20070411**

Priority  
CH 12302006 A 20060728

Abstract (en)  
[origin: EP1882767A1] The device for monitoring breakage of the needle thread (9) on automatic threading devices of a sewing machine, comprises a thread regulator with a regulator spring (25), a cam switch (39), which is effectively connected to the regulator spring and is inserted between a thread lever and a thread tension device, and a sensor (45) for monitoring presence or absence of the cam switch at the sensor. The cam switch comprises two detection zones (41) and the sensor has two independent switched detection areas. The cam switch is pivotal on a shaft stump and comprises an arc-segment shaped body. The device for monitoring breakage of the needle thread (9) on automatic threading devices of a sewing machine, comprises a thread regulator with a regulator spring (25), a cam switch (39), which is effectively connected to the regulator spring and is inserted between a thread lever and a thread tension device, and a sensor (45) for monitoring presence or absence of the cam switch at the sensor. The cam switch comprises two detection zones (41) and the sensor has two independent switched detection areas. The cam switch is pivotal on a shaft stump and comprises an arc-segment shaped body, with which a peripheral area of the detection zones is provided. The detection zones are light/dark areas, recesses or protrusions. The sensor comprises two parallel located light bars or proximity switches as detection means, which are arranged in a parallel or serial manner.

IPC 8 full level  
**D05B 51/00** (2006.01); **D05B 47/04** (2006.01)

CPC (source: EP US)  
**D05B 51/00** (2013.01 - EP US); **D05B 47/04** (2013.01 - EP US)

Cited by  
CN105671810A; CN106676773A

Designated contracting state (EPC)  
CH DE LI SE

DOCDB simple family (publication)  
**EP 1882767 A1 20080130; EP 1882767 B1 20130724**; US 2008022908 A1 20080131; US 7536963 B2 20090526

DOCDB simple family (application)  
**EP 07405114 A 20070411**; US 78054707 A 20070720