

Title (en)

Thread breakage detecting system for sewing machine.

Title (de)

Vorrichtung zur Fadenbruchfeststellung für Nähmaschine.

Title (fr)

Dispositif de détection de fil cassé pour machine à coudre.

Publication

**EP 0533464 A1 19930324 (EN)**

Application

**EP 92308445 A 19920917**

Priority

JP 27011991 A 19910920

Abstract (en)

The present invention aims to detect thread breakage in industrial sewing machines, especially multi-shaft sewing machines or multi-head sewing machines, by providing a pair of sensors (12,13) facing each other with the needle thread (N) between them. The sensors are disposed in the neighbourhood of the sending out position of the needle thread conducted by the needle shaft placed at the sewing position and detect the stop of sending out movement of the needle thread produced as a result of breakage. The invention also provides a mobile case (K) housing the bobbin (26) of the needle thread (N) movably on the machine head, a swing arm (24) which swings with a drive system on the side of the machine body, the tip of the swing arm being arranged in the shape of a fork (25) with a pair of sensors (22,23) disposed at the fork. <IMAGE>

IPC 1-7

**D05C 11/14**

IPC 8 full level

**D05C 11/14** (2006.01)

CPC (source: EP KR)

**D05B 65/00** (2013.01 - KR); **D05C 11/14** (2013.01 - EP)

Citation (search report)

- [A] DE 4013648 A1 19901031 - RYDBORN S A O [SE]
- [A] DE 3120355 A1 19820826 - CSEPEL MUEVEK JARMUE [HU]
- [A] US 4075958 A 19780228 - SACCHETTI ALFRED D

Cited by

CN111005168A; US7308333B2; WO9625544A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL PT SE

DOCDB simple family (publication)

**EP 0533464 A1 19930324**; CN 1075992 A 19930908; KR 930006228 A 19930421; TW 221065 B 19940211

DOCDB simple family (application)

**EP 92308445 A 19920917**; CN 92110808 A 19920919; KR 920017106 A 19920919; TW 81107084 A 19920908