

Title (en)  
THREAD SUPPLY CHECKING DEVICE FOR THE BOTTOM THREAD OF A SEWING MACHINE

Publication  
**EP 0009570 B1 19830309 (DE)**

Application  
**EP 79102827 A 19790806**

Priority  
DE 7827499 U 19780915

Abstract (en)  
[origin: US4237807A] A thread monitoring device for monitoring the thread supply in a sewing machine, having a rotary hook, comprises, a hook body with a thread bobbin having thread thereon which is connected to a rotatable shaft for rotation thereby. The hook includes a stationary bobbin case which is enclosed by a hook body which has a hub portion connected to the shaft. A light source is disposed on one side of the hook and a light receiver is disposed on the opposite side. Light is transmitted by the light source through a path intercepting the thread on the bobbin so that, when the thread on the bobbin is paid out during the stitching operation, beyond a predetermined amount, the light will be transmitted to a reflective wall portion of the hook body and deflected by the wall portion to the light receiver. The light receiver is connected in a control circuit to operate a control for operating the sewing machine or for actuating an indicator to show that the thread has been used up to the predetermined amount.

IPC 1-7  
**D05B 59/02**

IPC 8 full level  
**D05B 59/02** (2006.01)

CPC (source: EP US)  
**D05B 59/02** (2013.01 - EP US)

Cited by  
GB2136564A; GB2143549A; US5020461A; AU618924B2; WO8204447A1

Designated contracting state (EPC)  
CH FR GB IT SE

DOCDB simple family (publication)  
**EP 0009570 A1 19800416; EP 0009570 B1 19830309**; DE 7827499 U1 19781221; JP S5543897 U 19800322; US 4237807 A 19801209

DOCDB simple family (application)  
**EP 79102827 A 19790806**; DE 7827499 U 19780915; JP 12145079 U 19790904; US 7638079 A 19790917