

Title (en)  
YARN BREAKAGE SENSOR FOR CREEL DEVICE

Title (de)  
GARNBRUCHSENSOR FÜR SPULENGATTERVORRICHTUNG

Title (fr)  
CAPTEUR DE RUPTURE DE FIL POUR CANTRE

Publication  
**EP 3216733 B1 20190605 (EN)**

Application  
**EP 17153319 A 20170126**

Priority  
JP 2016046455 A 20160310

Abstract (en)  
[origin: EP3216733A1] To suppress adherence of dust to a light emitting surface of a light emitter (35a) and a light receiving surface of a light receiver (35b) of a yarn breakage sensor (30, 30') for a creel device (10) and prevent erroneous detection of yarn breakage, the yarn breakage sensor (30, 30') being provided for each yarn supply package (P) so that a yarn (T) that is pulled out from the yarn supply package (P) moves through a yarn movement path that is defined by a pair of facing surfaces (33a) that face each other in an up-down direction, and the yarn breakage sensor (30, 30') including the light emitter (35a) disposed in such a way that a light emission surface thereof is exposed at one of the pair of facing surfaces (33a) and the light receiver (35b) disposed in such a way that a light receiving surface thereof is exposed at the other of the pair of facing surfaces (33a) and that faces the light emitter (35a). The yarn breakage sensor (30, 30') includes a yarn guide (37, 38, 39) that is disposed at least on an upstream side, which is one of the upstream side and a downstream side, of the yarn movement path with respect to a path of the yarn (T) in which the yarn supply package (P) is on a most upstream side, the yarn guide (37, 38, 39) having a pair of restraining surfaces that face each other in the up-down direction. The distance (d) between the pair of restraining surfaces is smaller than or equal to 1/2 of the distance (D) between the pair of facing surfaces (33a).

IPC 8 full level  
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CPC (source: CN EP)  
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**B65H 2701/31** (2013.01 - CN EP)

Cited by  
CN114351314A; CN112376198A

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DOCDB simple family (publication)  
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