

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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Cited by
CN114351314A; CN112376198A

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