

Title (en)

BELT WITH AN INTEGRATED MONITORING MECHANISM

Title (de)

RIEMEN MIT INTEGRIERTER ÜBERWACHUNG

Title (fr)

COURROIE SURVEILLANCE INTEGREE

Publication

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Application

EP 03808834 A 20031010

Priority

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- IB 0304482 W 20031010

Abstract (en)

[origin: US7326139B2] A belt has at least two fiber strands which have synthetic fiber threads twisted in themselves and are designed for acceptance of force in longitudinal direction. The strands are arranged at a spacing relative to one another along the longitudinal direction of the belt and are embedded in a belt casing. At least one of the strands comprises an electrically conductive indicator thread which is twisted together with the synthetic fiber threads of the strand, wherein the indicator thread is arranged outside the center of the fiber bundle. The indicator thread has a breaking elongation ($\epsilon_{ult,Ind}$) which is smaller than the breaking elongation ($\epsilon_{ult,Trag}$) of individual synthetic fiber threads of the strand. It can be electrically contacted so that an electrical monitoring of the integrity thereof is made possible.

IPC 8 full level

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CPC (source: EP KR US)

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CN 1705789 A 20051207; DE 50306867 D1 20070503; DK 1554428 T3 20070618; EP 1554428 A1 20050720; EP 1554428 B1 20070321;
ES 2285258 T3 20071116; HK 1080914 A1 20060504; JP 2006508004 A 20060309; KR 101128313 B1 20120323; KR 20050055768 A 20050613;
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