

LINE GUIDE DEVICE WITH ELECTRICAL WEAR IDENTIFICATION AND RADIO CIRCUIT FOR IT

Abstract

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The invention concerns an active line guide (1) like for example an energy guiding chain with detection of deterioration. An apparatus (10) for detection of deterioration in a critical region of at least one portion (14) of the line guide is in the form of a radio circuit and is distinguished by a
10 transponder (20, 20A, 20B; 1220; 1320...) and at least one detector element (26; 1226, 1227; 1626) which cooperates with the transponder and which is so arranged that the detector element (26; 1226, 1227; 1626) changes the behaviour of the transponder at a predetermined amount of deterioration wear in the critical region (11). In that way a change due to
15 wear, for example due to abrasion wear, cracking and/or fatigue breakage, can be detected wirelessly, that is to say in contact-less fashion.

A corresponding system and a method as well as a detection module (100; 190; 200) for original fitment or retro-fitment to an active line guide (1) having a function for detection of deterioration are proposed.

20 A radio circuit (1610; 1710; 1810) is also disclosed for particularly reliable detection of deterioration.

(Figure 1)

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