

Abstract

5 The invention relates to a handrail tension monitoring device (41) for a passenger
transport system (1) designed as a moving walkway or escalator. The handrail tension
monitoring device (41) comprises at least a distance sensor (34) and a signal processing
unit (47). The measurement signals (M) detected by the distance sensor (34) can be
processed and evaluated in the signal processing unit (47). In the signal processing unit
10 (47), the vibration frequency (f) of a scanned handrail (15) of the passenger transport
system (1) can be determined from the signal curve (MV) of the measurement signals (M)
and said vibration frequency can be compared with at least one lower threshold value
(US) and/or upper threshold value (OS), an alarm signal (Z) being generated if the lower
threshold value (US) is not reached and a warning signal (W) being generated if the upper
15 threshold value (OS) is exceeded.

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(Fig. 2)