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Marvin et al.

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(54) **PROTECTION ASSEMBLY FOR ELEVATOR BRAKING ASSEMBLY SPEED SENSING DEVICE AND METHOD**

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(57) **ABSTRACT**

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A brake assembly for an elevator system includes a guide rail configured to guide movement of an elevator car. Also included is a safety brake operatively coupled to the elevator car and having a brake surface configured to frictionally engage the guide rail. Further included is a safety brake actuation mechanism operatively coupled to the safety brake and configured to actuate the brake member to a braking position. The safety brake actuation mechanism includes a sensing device disposed at a distance from the guide rail to determine a speed of the elevator car relative to the guide rail. The safety brake actuation mechanism also includes a first rigid plate having an inner edge disposed at a distance from the guide rail that is less than the distance that the sensing device is spaced from the guide rail to prevent the sensing device from contacting debris disposed on the guide rail.

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(52) **U.S. Cl.**

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(58) **Field of Classification Search**

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See application file for complete search history.

17 Claims, 4 Drawing Sheets

