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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

- (54) **Title:** SYSTEMS AND METHODS FOR BRAKE SENSING

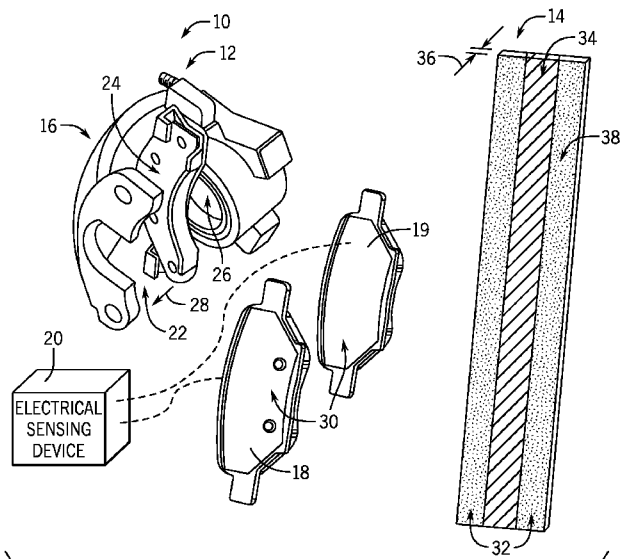


FIG. 1

(57) **Abstract:** SYSTEMS AND METHODS FOR BRAKE SENSING [0045] Present embodiments relate generally to brake systems, and more specifically, to caliper-based brake systems. In an embodiment, a method includes electrifying at least a portion of a first inner surface of a first brake block with a first potential. The method also includes electrifying at least a portion of a second inner surface of a second brake block with a second potential that is different from the first potential. The method includes performing an electrical measurement between the first brake block and the second brake block, wherein the electrical measurement includes a voltage measurement, a current measurement, a resistance measurement, a frequency measurement, or a combination thereof. The method further includes determining a position of the first and brake blocks relative to a brake member based on the electrical measurement.



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