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- (71) **Applicant:** **KENWAVE SOLUTIONS INC.** [CA/CA];
7080 Derrycrest Drive, Mississauga, Ontario L5W 0G5 (CA).
- (72) **Inventors:** **RIZKALLA, Elia**; c/o KENWAVE SOLUTIONS INC., 7080 Derrycrest Drive, Mississauga, Ontario L5W 0G5 (CA). **PERRIER, Sebastien**; c/o KENWAVE SOLUTIONS INC., 7080 Derrycrest Drive, Mississauga, Ontario L5W 0G5 (CA).
- (74) **Agent:** **NORTON ROSE FULBRIGHT CANADA S.E.N.C.R.L., S.R.L. / LLP**; 2500-1 Place Ville-Marie, Montréal, Québec H3B 1R1 (CA).
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(54) **Title:** METHOD AND SYSTEM FOR CHARACTERIZING AN ELONGATED MEDIUM

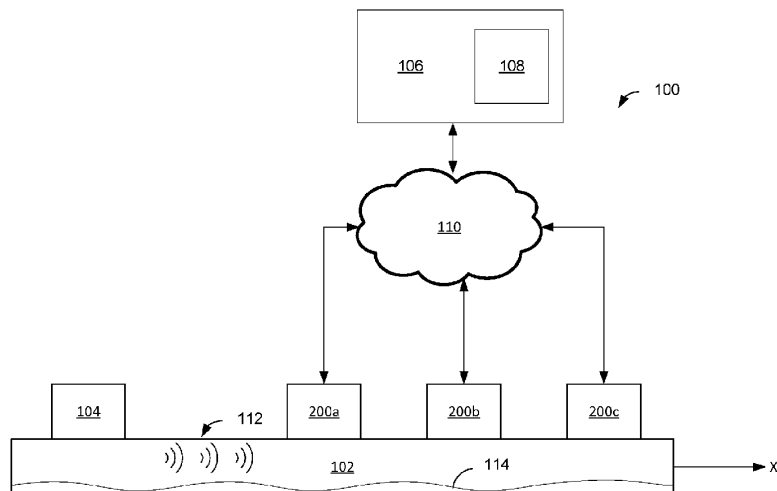


FIG. 1

(57) **Abstract:** There is disclosed a method for characterizing a dynamic behavior of an elongated medium, by generating an input wave signal including a vibro-acoustic wave signal and being selected to excite a mode of vibration in the elongated medium at an input location along the medium, the input wave signal; measuring a first output wave signal at a first location along the elongated medium, and generating a first electrical signal indicative of a first component of the first output wave signal; measuring a second output wave signal at a second location along the elongated medium and generating a second electrical signal based indicative of a second component of the second output wave signal; comparing the first and second components of the mode of vibration to one another based on the first and second electrical signals; and computing a dynamic response of the elongated medium based on said comparing.

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