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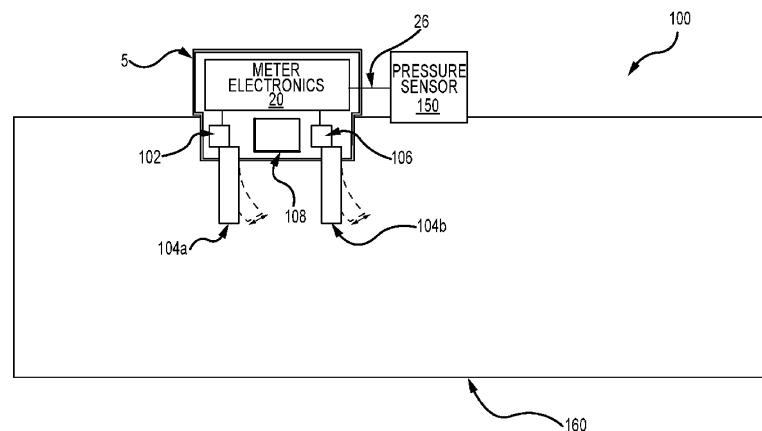


FIG. 1

(57) Abstract: A method for determining an inferential relationship between an inferred energy content and at least one measured quantity is disclosed. The inferential relationship yields an inferred energy content. The method uses a computer (200) having a processor (210) configured to execute commands based on data stored in a memory (220), the processor (210) implementing steps of an inference module (204) stored in the memory (220), the method comprising a step of determining, by the inference module (204) the inferential relationship by analyzing a relationship between known measurements of at least one measured energy content of at least one fluid and at least one corresponding measured value of a same type as the at least one measured quantity wherein the inferential relationship has a density term (B), wherein one of the at least one measured quantity is a measured density

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(ρ) and the density term (B) has an inverse density ($1/\rho$), the density term (B) representing an inverse relationship between density (ρ) and the inferred energy content, and wherein the measured density (ρ) is not a density of air (ρ_{air}).