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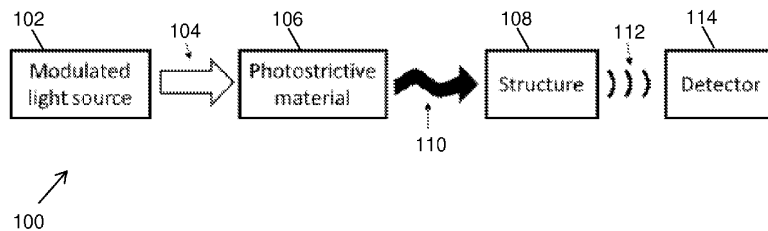


FIGURE 1

(57) Abstract: A light-acoustic system and method for detecting an anomaly in a structure are provided. The system includes a light source configured to emit an excitation light and at least one excitation element attached to a surface of a structure. The at least one excitation element includes a photostrictive material and is configured to receive the excitation light for generating an oscillating strain. The oscillating strain generates an acoustic wave in the structure. The system also includes a detector configured to detect the acoustic wave.



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