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Bozich et al.

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- [54] **ACTIVE GAS TURBINE (JET) ENGINE NOISE SUPPRESSION**
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- [73] Assignee: **Noises Off, Inc., White Plains, N.Y.**
- [21] Appl. No.: **961,612**
- [22] Filed: **Oct. 13, 1992**
- [51] Int. Cl.⁶ **F02G 1/00; A61F 11/06; H04R 3/02**
- [52] U.S. Cl. **60/39.33; 415/119; 381/71; 381/73.1**
- [58] Field of Search **60/39.33; 415/119; 381/71, 73.1**

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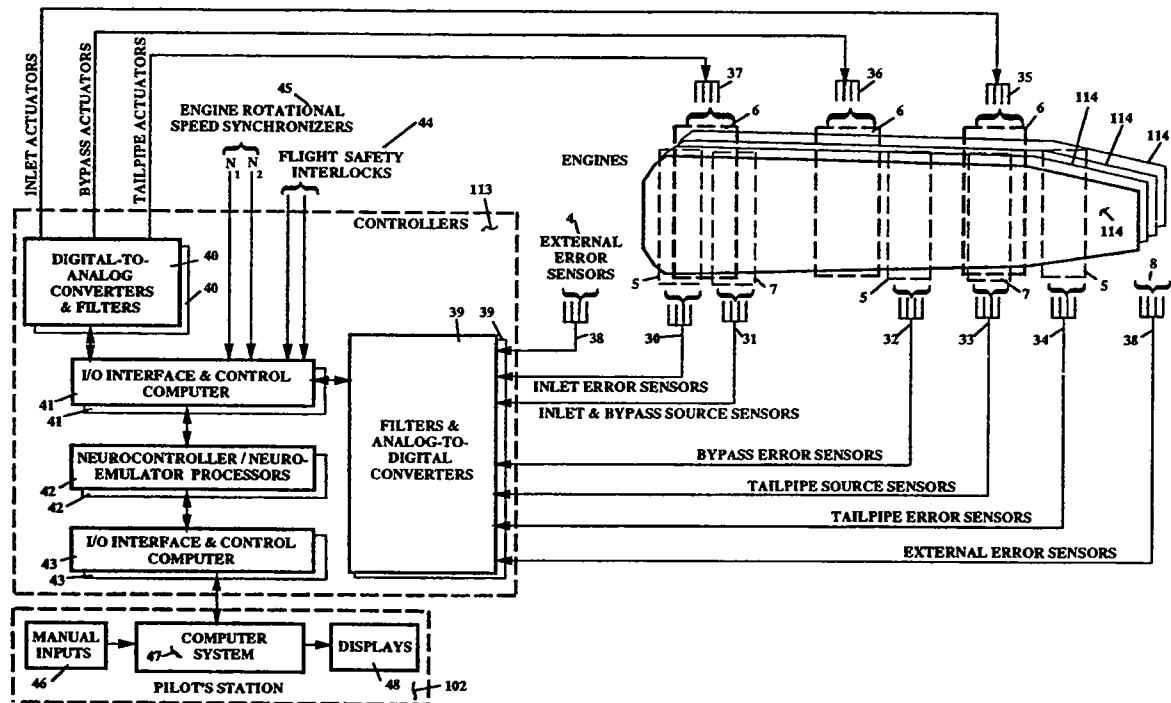
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[57] ABSTRACT

A method and a system for reducing the acoustic levels of internal and external sound fields generated by gas turbine engines has several actuators to generate sound, several sensors to measure the acoustic levels, and one or more controllers. The controllers are adaptive self-learning neural networks that control the actuators to generate sound in order to effect the reduction of the internal and external sound field as measured by the Sensors.

14 Claims, 28 Drawing Sheets

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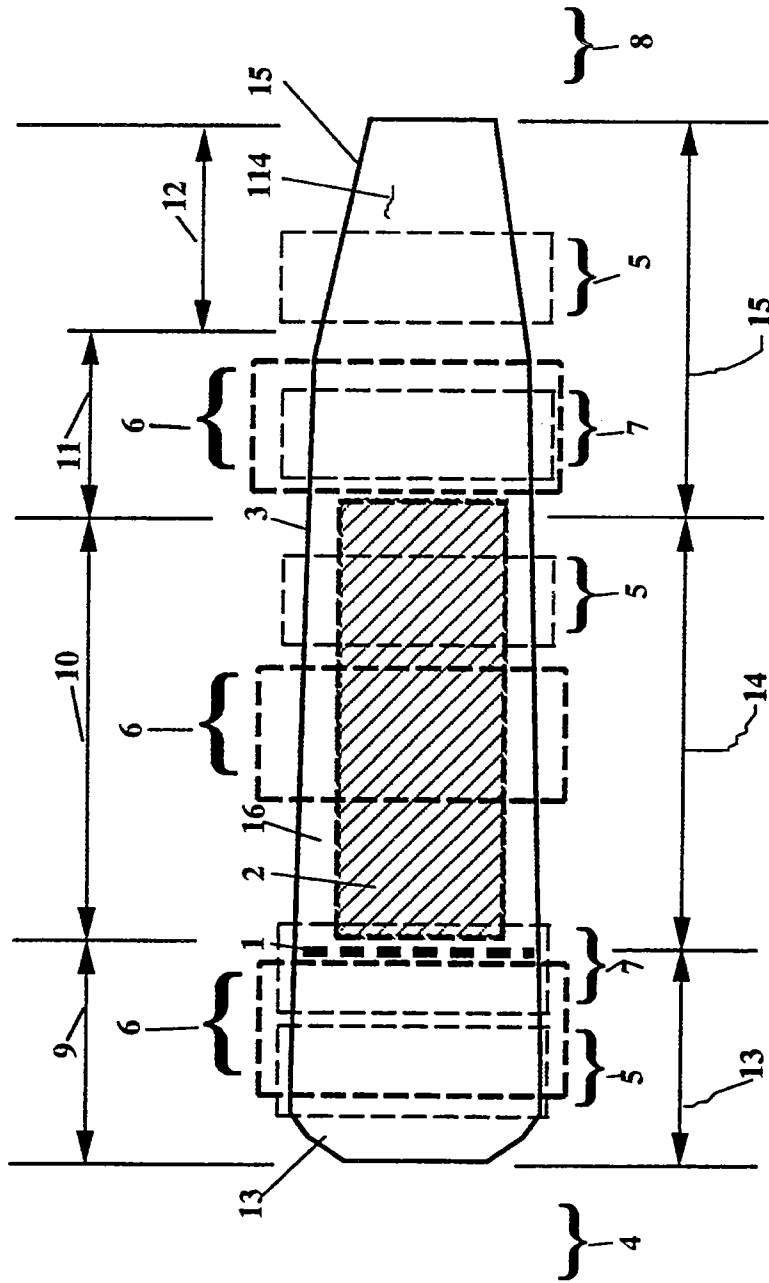


FIGURE 1A

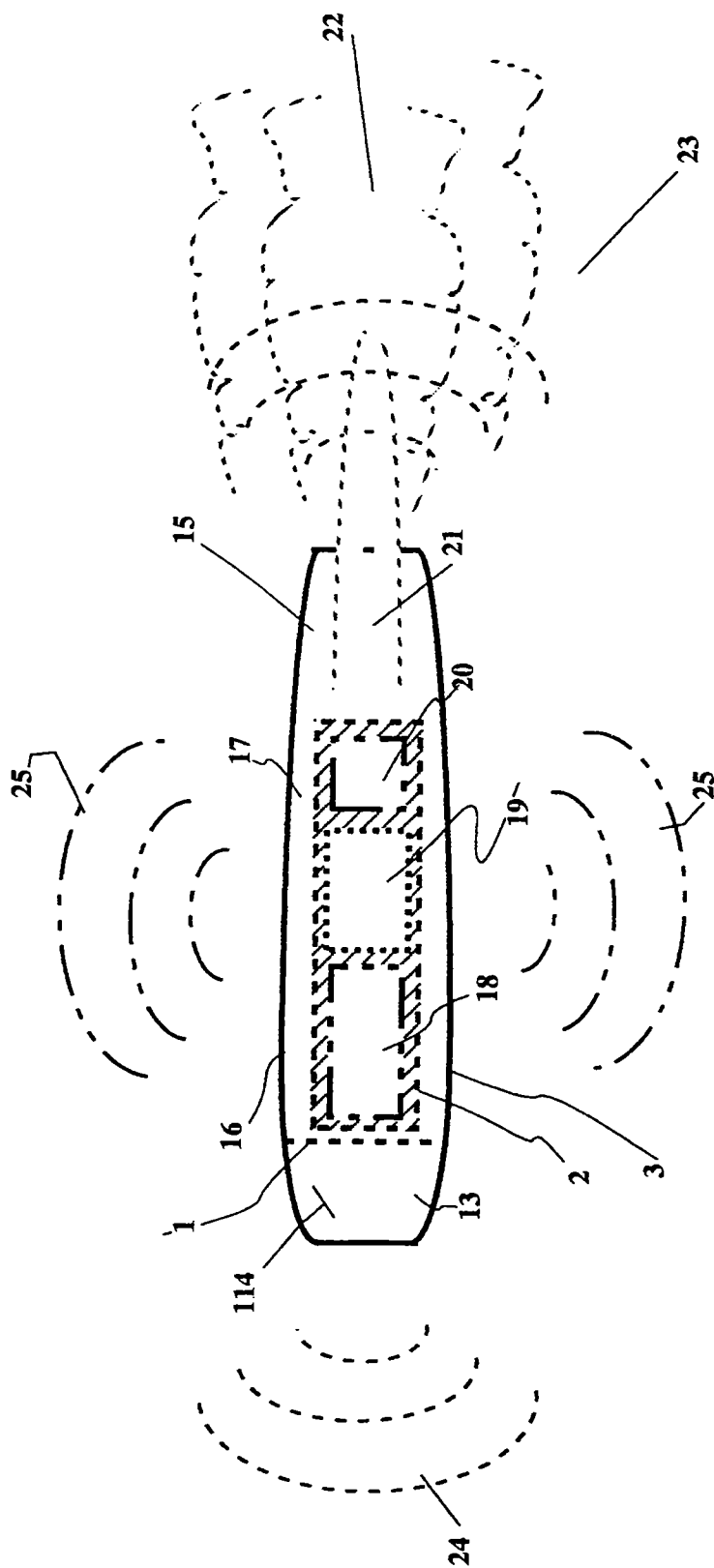


FIGURE 1B

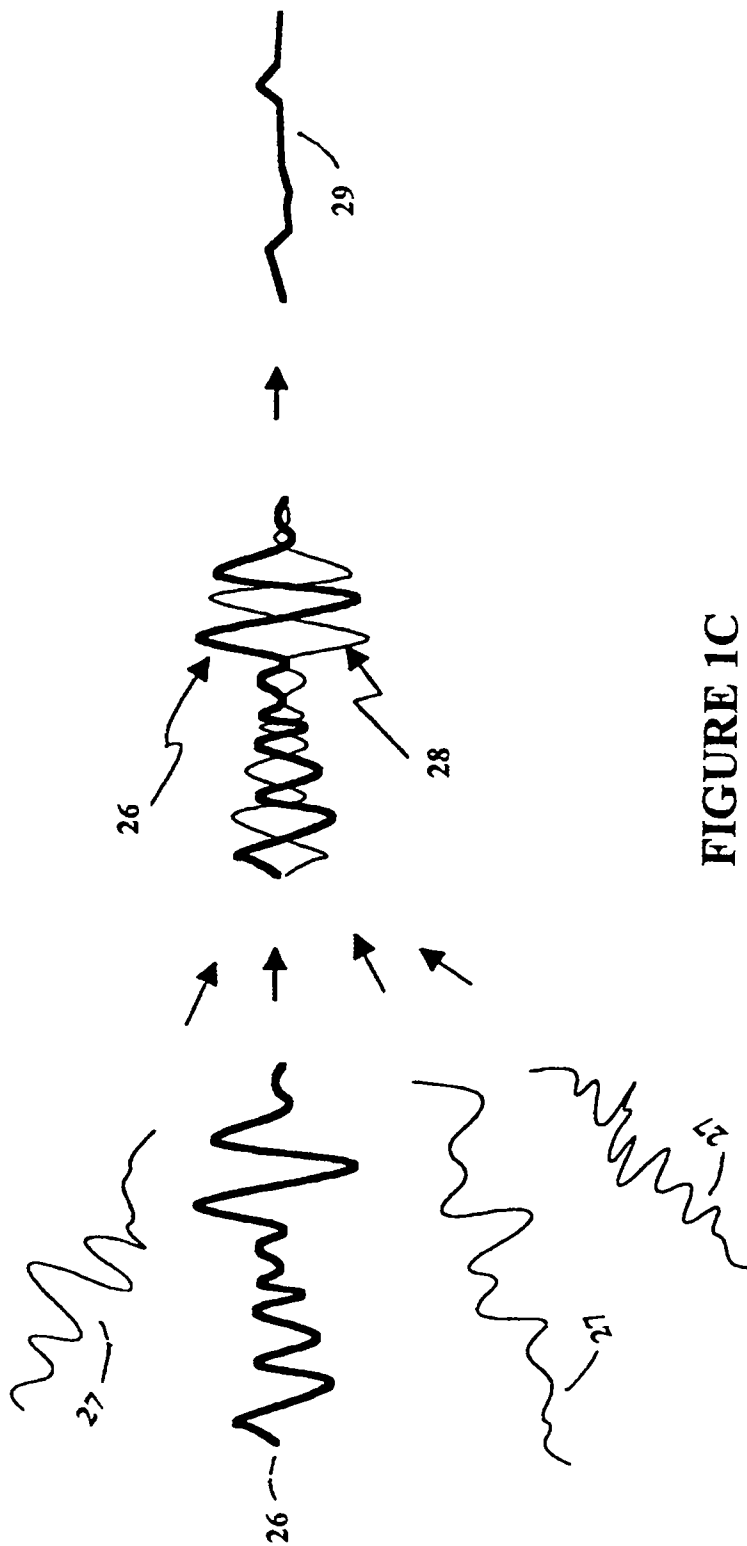


FIGURE 1C

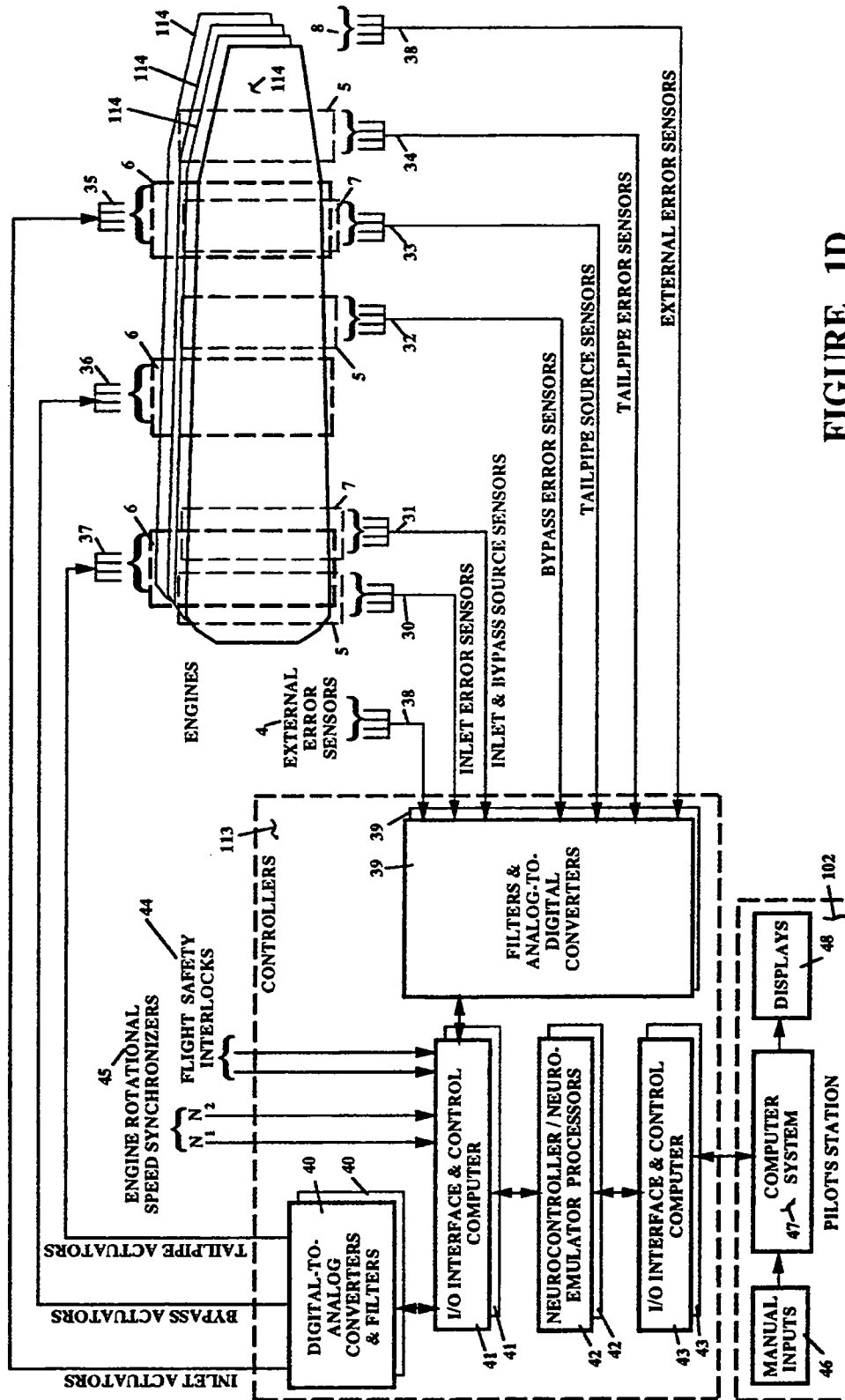


FIGURE 1D

