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Jiang

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(54) **SYSTEM FOR USING SILENCE IN SPEECH RECOGNITION**

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Related U.S. Application Data

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(51) **Int. Cl.**^{7} **G10L 15/04**
(52) **U.S. Cl.** **704/255**; 704/251; 704/252; 704/254
(58) **Field of Search** 704/251, 252, 704/253, 255, 256, 257, 242

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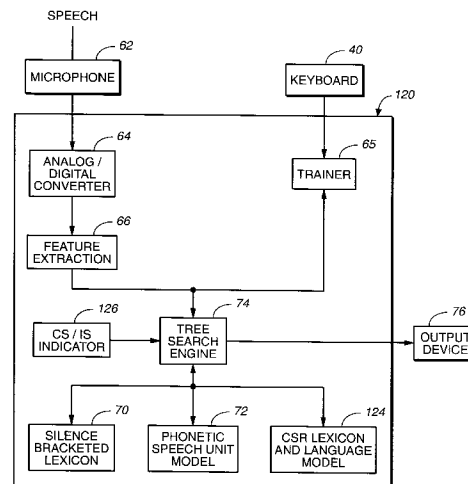
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(57) **ABSTRACT**

A system for recognizing speech based on an input data stream indicative of the speech provides possible words represented by the input data stream as a prefix tree including a plurality of phoneme branches connected at nodes. The plurality of phoneme branches is bracketed by at least one input silence branch corresponding to a silence phone on an input side of the prefix tree and at least one output silence branch corresponding to a silence phone on an output side of the prefix tree. The prefix tree is traversed to obtain a word that is likely represented by the input data stream. The silence phones provided in the prefix tree can vary based on context.
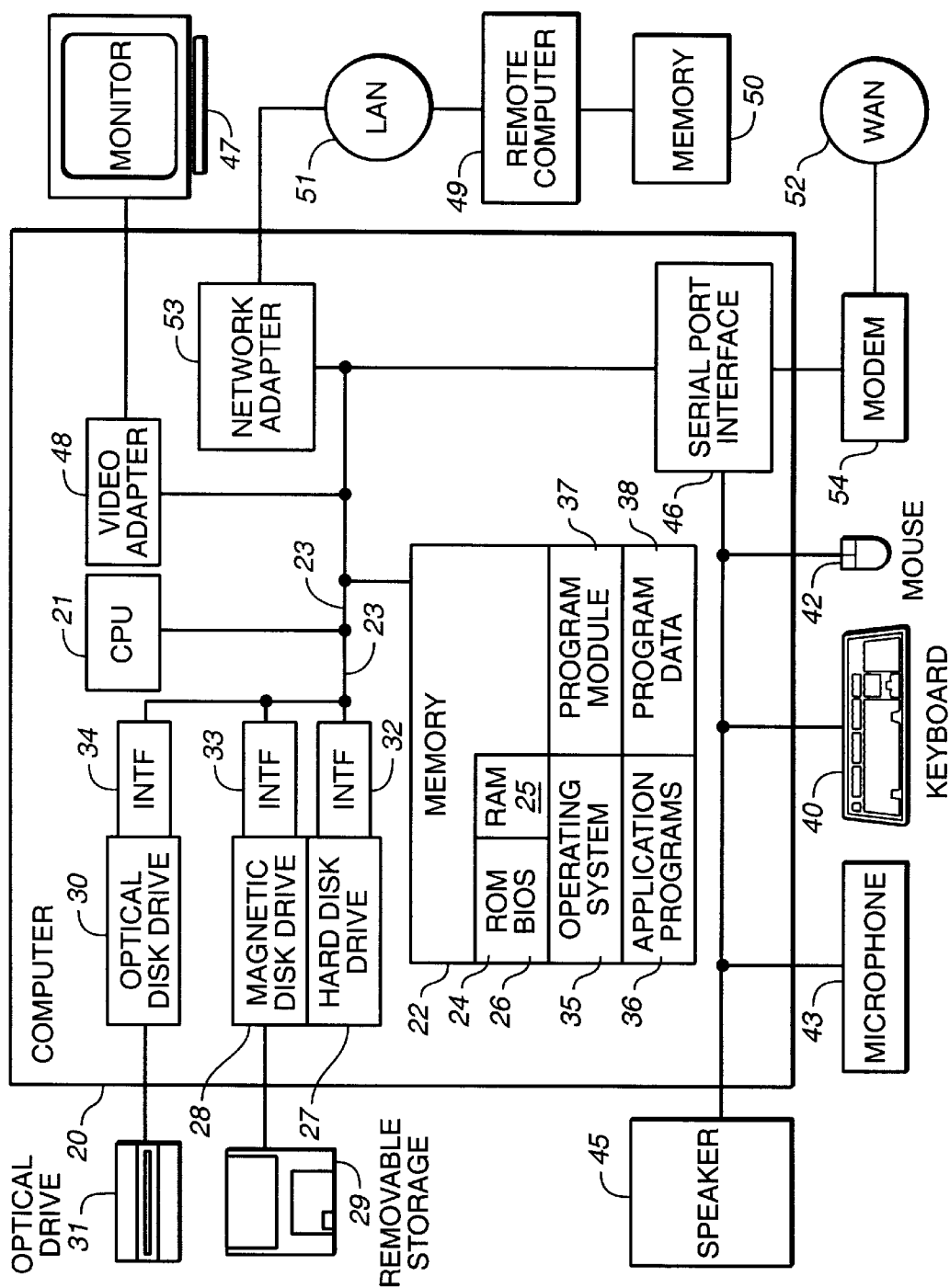
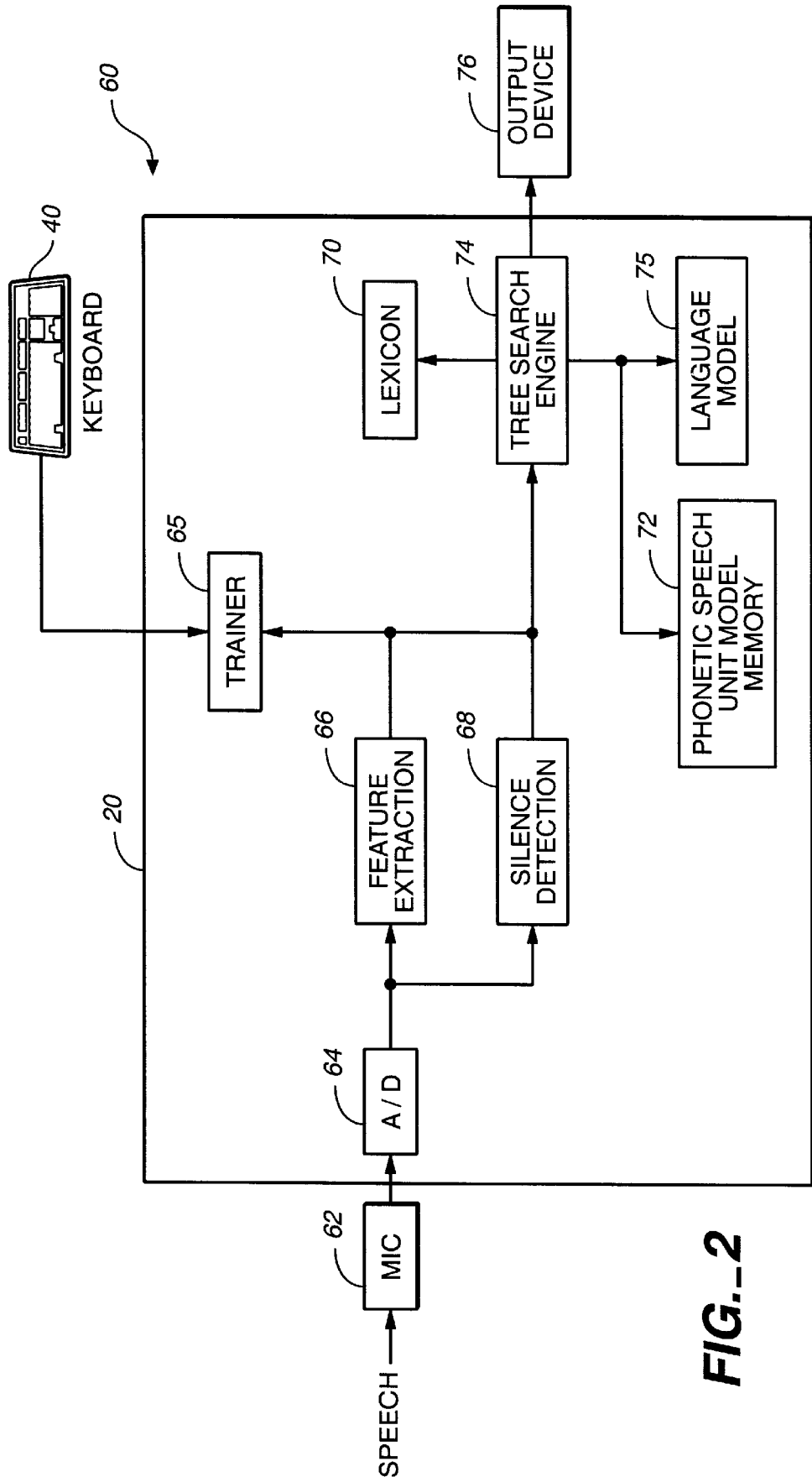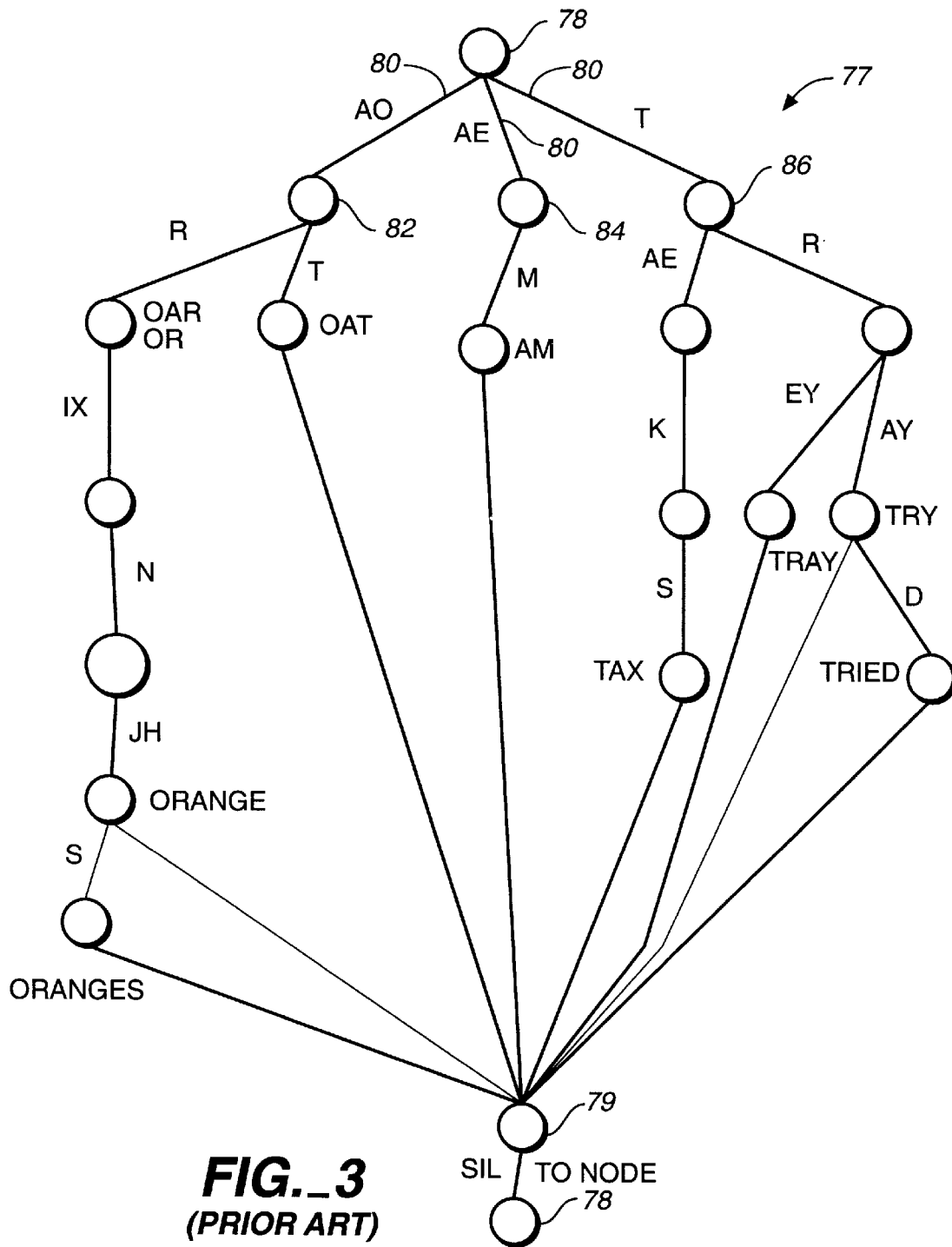**23 Claims, 7 Drawing Sheets**

FIG._1

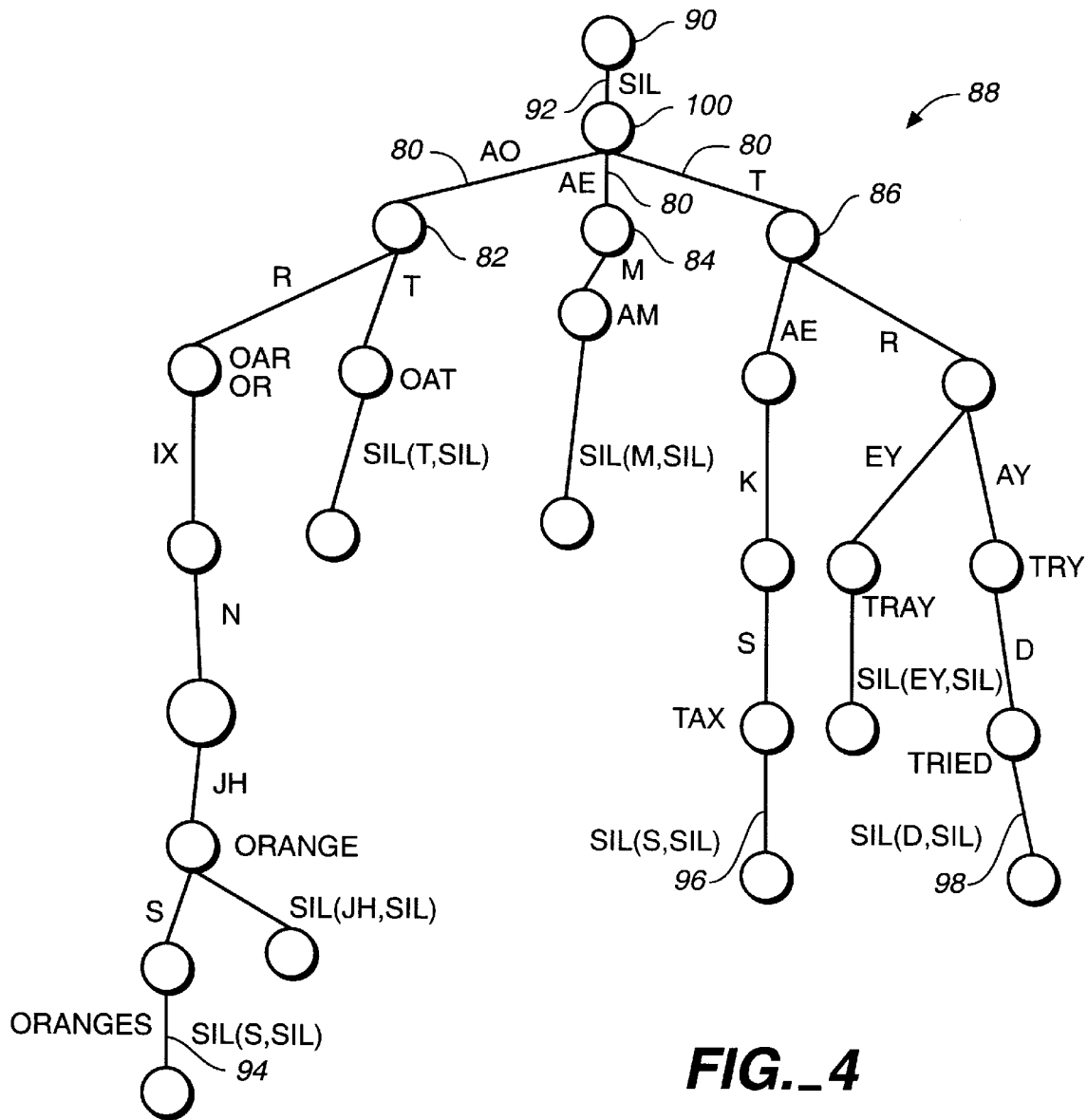*FIG._2*

FIG._3
(PRIOR ART)

FIG._4

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