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- (71) **Applicant: TENCENT TECHNOLOGY (SHENZHEN) COMPANY LIMITED** [CN/CN]; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian, Shenzhen, Guangdong 518000 (CN).
- (72) **Inventors: YUE, Shuai;** Room 403, East Block 2, SEG Park, Zhenxing Road, Futian, Shenzhen, Guangdong 518000 (CN). **LU, Li;** Room 403, East Block 2, SEG Park, Zhenxing Road, Futian, Shenzhen, Guangdong 518000 (CN). **ZHANG, Xiang;** Room 403, East Block 2, SEG Park, Zhenxing Road, Futian, Shenzhen, Guangdong 518000 (CN). **XIE, Dadong;** Room 403, East Block 2, SEG Park, Zhenxing Road, Futian, Shenzhen, Guangdong 518000 (CN). **CHEN, Bo;** Room 403, East Block 2, SEG Park, Zhenxing Road, Futian, Shenzhen, Guangdong 518000 (CN). **RAO, Feng;** Room 403, East Block 2, SEG

Park, Zhenxing Road, Futian, Shenzhen, Guangdong 518000 (CN).

- (74) **Agent: BEIJING SAN GAO YONG XIN INTELLECTUAL PROPERTY AGENCY CO., LTD;** A-1-102, He Jing Yuan, Ji Men Li, Xueyuan Road, Haidian, Beijing 100088 (CN).

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- (54) **Title: METHOD AND SYSTEM FOR AUTOMATIC SPEECH RECOGNITION**

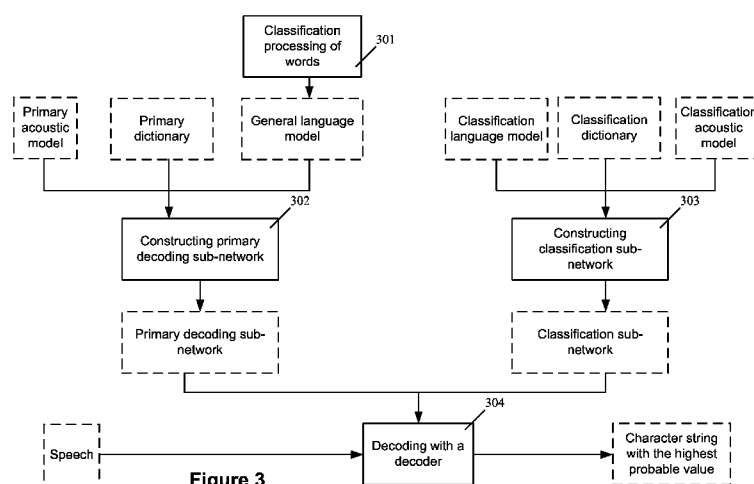


Figure 3

- (57) **Abstract:** A method and system for automatic speech recognition is provided. The method includes generating a decoding network that includes a primary sub-network and a classification sub-network. The primary sub-network includes a classification node corresponding to the classification sub-network. The classification sub-network corresponds to a group of uncommon words. Speech input is received and decoded by instantiating a token in the primary sub-network and passing the token through the primary network. When the token reaches the classification node, the method includes transferring the token to the classification sub-network and passing the token through the classification sub-network. When the token reaches an accept node of the classification sub-network, the method includes returning a result of the token passing through the classification sub-network to the primary sub-network. The result includes one or more words in the group of uncommon words. A string corresponding to the speech input is output that includes the one or more words.





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