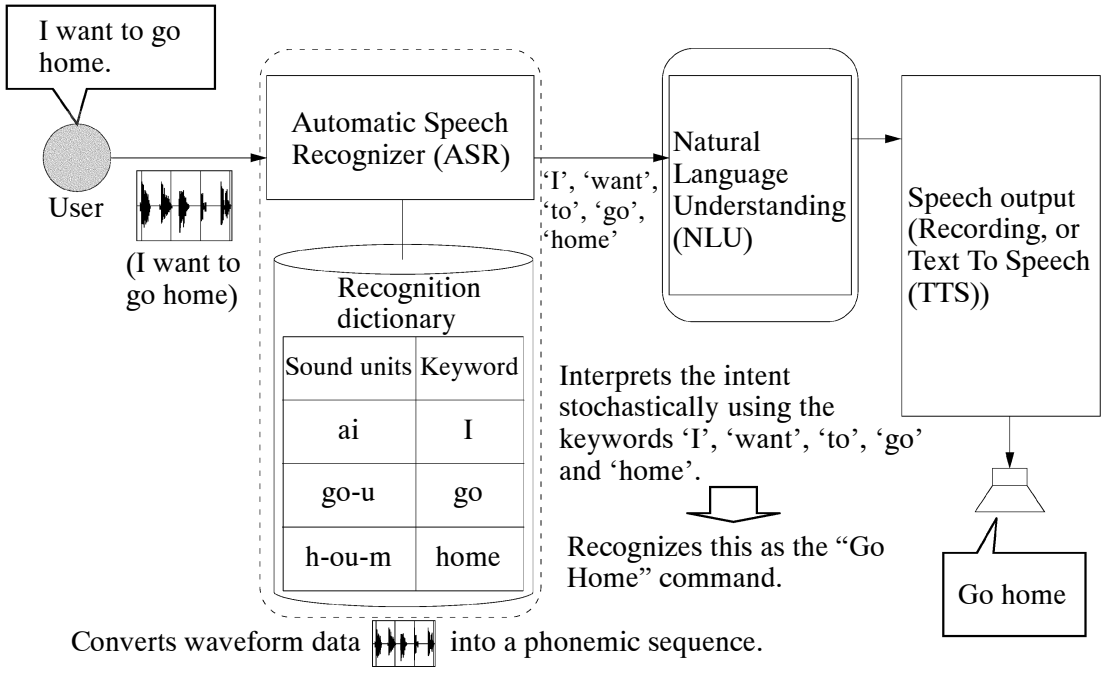
■ VOICE RECOGNITION SYSTEM

- When the voice recognition system starts operating, the commands that the system is able to recognize are displayed on the multi-display.
- In the aim of enabling the user to operate the system with minimal spoken words, the recognition command screen is designed to show not only sample spoken words for short-cut commands, but also tabs for the major functions such as Audio, Navi and Phone. When a tab is selected, a detailed list of the voice recognition commands will be displayed for the corresponding function.
- The natural speech technology* adopted for this voice recognition system can recognize a user's natural speech as voice recognition commands. ("natural speech" refers to naturally spoken utterances that include several keywords.)
- Natural speech technology* enhances the usability because the user does not have to memorize voice recognition commands exactly.
- Natural speech technology* uses the system's Automatic Speech Recognizer (ASR) and Natural Language Understanding (NLU) to recognize voice recognition commands.
  - The ASR extracts keywords from a user's natural speech using a phonemic sequence (the units of sound that make up a phrase or sentence).
  - The NLU analyzes these extracted keywords based on their probable meaning, interpreting the intent of the user's utterances.

*: Natural speech technology does not apply to French or Spanish.

▶ Example of 'I want to go home': ◀



Converts waveform data into a phonemic sequence.

'ai', 'wo-nt', 'tu', 'go-u', 'h-ou-m'

Matches the phonemic sequence converted from the user's speech with the sound unit sequence in the recognition dictionary.

Extracts keywords with a high level of relevance.

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