

**FEATURE EXTRACTION APPARATUS AND METHOD AND PATTERN
RECOGNITION APPARATUS AND METHOD**

ABSTRACT OF THE DISCLOSURE

It is intended to increase the recognition rate in speech recognition and image recognition. An observation vector as input data, which represents a certain point in the observation vector space, is mapped to a distribution having a spread in the feature vector space, and a feature distribution parameter representing the distribution is determined. Pattern recognition of the input data is performed based on the feature distribution parameter.

Figure 3