

ABSTRACT OF DISCLOSURE

The invention provides a sound detecting mechanism capable of forming a diaphragm and a back electrode on a substrate by a simple process.

Acoustic holes corresponding to perforations Ba are formed on a front surface of a substrate A. A second protective film 406, a sacrificial layer D (407) and a metal film 408 are laminated on the front surface in a portion corresponding to the acoustic holes. The substrate A is etched from the back surface thereof to a depth reaching the acoustic holes to form an acoustic opening E. Subsequently, by effecting an etching from the back surface of the substrate A through the acoustic holes, the sacrificial layer 407 is removed and there are formed a void area F between the diaphragm C made of the metal film 408 and the substrate A and formed the perforations Ba. The sacrificial layer 407 remaining after the etching is used as a spacer D for maintaining a gap between the back electrode B and the diaphragm C.