Literatures 1 and 2).

[Citation List]

[Patent Literature]

[0003]

[Patent Literature 1]

Japanese Unexamined Patent Publication (Kokai) No. 2005-28734

[Patent Literature 2]

Japanese Unexamined Patent Publication (Kokai) No. 2011-171586

[Summary ~~of Invention~~]

[Technical Problem]

[0004]

When the adhesive is laminated on the semiconductor chip using the adhesive sheet mentioned above, it was possible to exposure the bump electrode to some extent, but it was impossible to put into a state where no adhesive exists on tops (bump tops) of the bump electrode. As a result, it was difficult to ensure sufficient connection reliability by interposing the adhesive between the bump electrode of the semiconductor chip and the pad electrode of the circuit board after packaging.

[0005]

In view of these circumstances, an object of the embodiments of the present ~~invention~~ disclosure is to provide an adhesive sheet capable of putting into a state where no adhesive exists on bump tops without imparting

damage to a bump electrode when an adhesive is laminated on a semiconductor chip using the adhesive sheet, thus enabling the production of a semiconductor device which is excellent in connection reliability between the bump electrode of a semiconductor chip and a pad electrode of a circuit board after flip chip packaging.

[Solution to Problem]

[0006]

~~Namely, the present invention is directed to~~In a first aspect, there is provided an adhesive sheet for production of a semiconductor device with bump electrode, comprising a soft film and~~in which~~ an alkali-soluble adhesive film ~~is~~ formed on the~~a~~ soft film.

[0007]

~~The present invention also includes~~In a second aspect, there is provided a method for production of a semiconductor device, which ~~includes~~ comprises the steps of: laminating a face of the alkali-soluble adhesive film side of the adhesive sheet for production of a semiconductor device with bump electrode ~~according to any one of claims 1 to 7~~as defined above on a face of the bump electrode side of a first circuit member including a bump electrode; leaving only the alkali-soluble adhesive film of the adhesive sheet on the circuit member, and peeling other films included in the adhesive sheet; etching the alkali-soluble adhesive film with an aqueous alkali solution to remove the adhesive on the bump electrode; and electrically connecting the first circuit member

with a second circuit member including a pad electrode by applying heat and pressure, in this order.