



English translation sample

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What is claimed is:

1. A flux transfer apparatus that transfers flux to an electronic component, comprising:
 - a base unit comprising a smooth film-forming surface whereby a flux film that is to be brought into contact with said electronic component is formed on the upper surface thereof;
 - a moving member horizontally movable along said base unit;
 - a blade holding unit that is swingably held by said moving member around a swing support point, and reciprocates back and forth with said moving member;
 - a first blade and a second blade that are provided on said blade holding unit and spaced apart in said reciprocating direction so that a location in said reciprocating direction of said swing support point is interposed therebetween;
 - a reciprocating mechanism that transmits a reciprocating driving force utilizing a position separated from said swing support point of said blade holding unit as the driving point; and
 - a control mechanism that brakes said moving member in the direction opposite the driving direction resulting from said reciprocating mechanism using a braking resistance of a size that overcomes the swinging resistance during the swinging of said blade holding unit, wherein:
 - either blade of said first blade and second blade is moved while being brought into contact with said base unit when said moving member moves in one of the reciprocating directions, and the other blade is moved while being brought into contact with the base unit when said moving member moves back in the other of the reciprocating directions.
2. The flux transfer apparatus according to claim 1, wherein:
 - said first blade is a film-forming blade that forms a flux film of a predetermined film thickness on said film-forming surface; and
 - said second blade is a scraping blade that scrapes away the flux that exists on said film-forming surface.
3. The flux transfer apparatus according to claim 2, wherein:

a notch unit of a depth corresponding to said film thickness is provided in the area that contacts said base unit of said film-forming blade; and
said scraping blade is formed so that the blade comes in contact with said film-forming surface of said base unit.

4. The flux transfer apparatus according to claim 2, wherein a concave unit having a bottom surface that functions as said film-forming surface and a depth corresponding to said film thickness is provided on the upper surface of said base unit, and said scraping blade is formed so that the blade comes in contact with the bottom surface of said concave unit.

5. The flux transfer apparatus according to claim 1, wherein a flux storage unit that stores the flux scraped away from said film-forming surface is provided between said first blade and second blade.

6. An electronic component mounting apparatus comprising:

a mounting head that holds and mounts an electronic component onto a substrate;

a substrate holding unit that holds said substrate;

a head moving apparatus that moves and positions said mounting head with respect to said substrate holding unit; and

the flux transfer apparatus according to one of the claims 1 to 5 that is disposed on the moving path of said mounting head by said head moving apparatus, and transfers flux to said electronic component held by said mounting head.