Example 1 of the present invention; Fig. 2 shows an exploded perspective view of a tapping applicator with accordance to Example 1 of the present invention; Fig. 3 shows a cross-sectional view of a tapping applicator with accordance to Example 1 of the present invention with a magnet dropped; and Fig. 4 shows a cross-sectional view of a tapping applicator with accordance to Example 1 of the present invention with a magnet elevated.

According to Example 1 of the present invention, a tapping applicator comprises a stationary part; a vibrating part vibrating provided on the stationary part; a power supply which supplies a power source; and a control part which controls the power supply.

The stationary part consists of casing 10, insulating spool 18 provided on the bottom of casing 10, and coil 19 which winds around insulating spool 18.

Casing 10 consists of upper case 14 and lower case *12* which is removably provided on upper case 14, and an interior space is formed by upper case 14 and lower case *12*.

Insulating spool 18 is provided on the bottom of lower case 12, and has a cylindrical shape with the top and bottom portions opened. Preferably, insulating spool 18 is fitted on support 15 which projects upwardly such that magnet 20 drops a desired path toward the bottom of the insulating spool. Furthermore, insulating spool 18 is preferably formed of engineering plastics in the terms of an insulating property and strength.

Coil 19 which winds around insulating spool 18 applies an alternating current power source, thereby forming electric field to move up and down magnet 20, as described below.

The vibrating part consists of magnet 20 inserted into the interior of insulating spool 18 which is movable up and down, vibrating plate ~~22~~ 11 integrated in the top of magnet 20, and puff 24 which be vibrated by vibrations of vibrating plate ~~22~~ 11.

Magnet 20 has a rod shape in which positive and negative poles (or negative and positive poles) are formed on the upper and lower portions of the rod, respectively, so that the magnet moves upwardly and downwardly depending on the directions of currents *applied* in coil 19. The movement direction of magnet 20 is determined depending on the directions of currents which flow on coil *19* according to Fleming's left hand rule.

Vibrating plate 11 is provided on the top of the magnet and has a disc shape which can be covered by puff 24. Thus, as magnet 20 vibrates up and down, vibrating plate 11 is engaged and vibrated up and down. Puff 24 is fitted to vibrate by vibrations of vibrating plate 11.

Puff 24 is inserted and fixed into step height portion 16 formed on a rim of vibrating plate 11 by ring 26 such that puff 24 is fitted to cover vibrating plate 11 formed on the top of

【CLAIMS】

【Claim 1】

A tapping applicator comprising:

a stationary part consisting of a casing, an insulating spool provided on the bottom of the casing, and a coil which winds around the insulating spool;

a vibrating part consisting of a magnet inserted to move up and down along a hollow of the insulating spool, a vibrating plate integrated into the magnet in the top of the magnet, and a puff which is vibrated by vibrations of the vibrating plate; and

a power supply which supplies an alternating current power source to the coil.

【Claim 2】

The tapping applicator according to claim 1, wherein the power supply consists of a battery, a vibration-generating module which converts direct currents from the battery to alternating current, and a control part which controls the vibration-generating module.

【Claim 3】

The tapping applicator according to claim 1, wherein the power supply consists of a home power source between 100V and 200V, and a transforming module which drops a voltage from the home power source.

【Claim 4】

The tapping applicator according to claim 1, wherein the puff is NBR puff or flocking puff.

【Claim 5】

The tapping applicator according to claim 4, wherein the NBR puff has compressibility between 20% and 40%.

【Claim 6】

The tapping applicator according to claim ~~1~~ 4, wherein the flocking puff has a filament length between 0.6mm and 1.4mm.