

providing circuitry for electrical connection to the print engine controller,
 providing a support member for supporting the printhead IC and the circuitry within the
 printer;

providing a polymer film;

~~securing the polymer film to a surface of the support member by applying heat and pressure
 for a predetermined time;~~

~~mounting the printhead IC and the circuitry to the support member via the polymer film;
 and, providing a laminate polymer film comprising an adhesive layer on both sides of a central film, wherein a
 first adhesive layer on one side of the central film has a lower curing temperature than a second adhesive layer
 on an opposite side of the central film; securing the first adhesive layer of the polymer film to a surface of the
 support member by applying heat and pressure for a predetermined time; mounting the printhead integrated
 circuit and the circuitry to the second adhesive layer of the polymer film; and,~~

electrically connecting the circuitry to the printhead IC.

Attaching both the printhead IC and the flex PCB to the support member with a polymer film is a relatively quick and simple step as the highly precise alignment of the tracks and the bond pads is not critical. The tracks can be subsequently connected to the bond pads in an automated process. Equipment is available that will optically locate the end of the track and wire it to the corresponding bond pad on the printhead IC. Small inaccuracies in the registration of the tracks and the bond pads will not prevent the flex PCB from connecting to the printhead IC, especially long IC's used in pagewidth printhead. As a result the overall process is more time efficient and commercially practical.

In a first preferred form, the circuitry is a flex PCB with tracks of conductive material in layers of polyimide film, and the printhead IC and the flex PCB are simultaneously attached to the support member via the polymer film. In a second preferred form, the circuitry is a flex PCB with tracks of conductive material in layers of polyimide film, and the flex PCB is attached to the polymer film after the printhead IC is attached. Optionally the flex PCB has an adhesive area for attachment to the polymer film once the polymer film has cooled and hardened after the printhead IC attachment process. According to a third preferred form, the circuitry is tracks of conductive material laid within the polymer film. It will be appreciated that in this form, the polymer film effectively becomes the flex PCB.

In preferred forms, the printhead IC has a series of bond pads and the circuitry is a series of conductive tracks, whereby the step of electrically connecting the circuitry to the printhead IC involves lacing fine wiring between the bond pads and the corresponding conductive track before covering the fine wiring in a line of protective encapsulator material.

In some preferred embodiments, the support member has a plurality of ink feed conduits for establishing fluid communication with at least one ink storage compartment; and,