

RESILIENT PLASTIC WEB EXHIBITING REDUCED SKIN CONTACT AREA AND
ENHANCED FLUID TRANSFER PROPERTIES

ABSTRACT

A resilient three-dimensional plastic web exhibiting reduced skin contact area and a fiber-like appearance and tactile impression. The web has a multiplicity of apertures therein, each being defined by a multiplicity of intersecting fiber-like elements interconnected to one another in the plane of the first surface of the web. Each of the fiber-like elements exhibits a substantially uniform generally upwardly concave shaped cross section along its length. The cross section comprises at least one pair of convergent substantially linear portions which intersect one another to form a vertex in the plane of the first surface of the web. This vertex reduces the skin contact area of the web providing a more comfortable feel for the user when the web is employed as a wearer contacting topsheet in a disposable absorbent bandage. Furthermore, the web provides a substantially non-glossy visible surface as there is almost no substantially planar portion in its uppermost surface to reflect incident light to the viewer's eye. The pattern of intersecting vertices in the first surface of the web substantially eliminates pooling of fluids on the first surface of the web, since there is almost no substantially planar portion on which the fluids may pool. This further contributes to the web's clean and dry appearance in use as well as more rapid fluid transport into the underlying absorbent core.

Figure 4