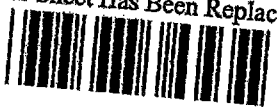
UFB-032

ABSTRACT OF THE DISCLOSURE

Formed constituents in an aqueous based fluid biologic material sample are separated from the aqueous constituent of the sample, and are concentrated in an examining instrument's focal plane where they can be examined under magnification. Examples of fluids that can be analyzed in this fashion include urine; cerebrospinal fluid; pleural fluid; ascites; fluids aspirated from cysts such as thyroid and breast cysts; cytologic specimens which have been placed in an aqueous fluid; platelet-rich plasma; and the like. The sample is placed in a chamber having a layer of a hydrophilic hydrogel covering a surface of the chamber. An opposite surface of the chamber is transparent, and may be formed by a microscope slide cover slip, or the like. The volume of hydrogel in the chamber is sufficient so that, when the hydrogel absorbs essentially all of the aqueous fraction of the sample, the hydrogel will expand and fill the chamber. The capture surface of the expanded hydrogel is preferably planar, and any formed constituents in the sample will be captured on the capture surface of the hydrogel layer, and will not be absorbed into the hydrogel. Formed constituents, such as: cells; bacteria; crystals; protozoa; ova; parasites; and the like, can be differentially highlighted by use of labeled antibodies, selective stains, or the like, so as to enable optical examination and differentiation of various formed constituents which may be in the sample. Formed constituents may be harvested from the capture surface of the expanded hydrogel layer for more detailed examination and analysis. The capture surface of the hydrogel may be provided with a plurality of beads for use in locating the capture surface with an optical scanning instrument, and for re-establishing previously scanned fields of view.

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