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(54) Title: MULTIPLEX ANALYSIS USING MEMBRANE-BOUND SENSITIZERS

(57) Abstract: The present invention is directed to methods and compositions for determining the presence, absence, and/or amounts of one or more membrane-associated analytes in a sample. In accordance with the invention, binding compounds derivatized with releasable molecular tags specifically bind to selected membrane-associated analytes, after which the molecular tags are released upon activation of cleavage moieties, or sensitizers, anchored in the same membrane as the membrane-associated analytes. The released molecular tags are then identified by their distinct separation and detection characteristics.