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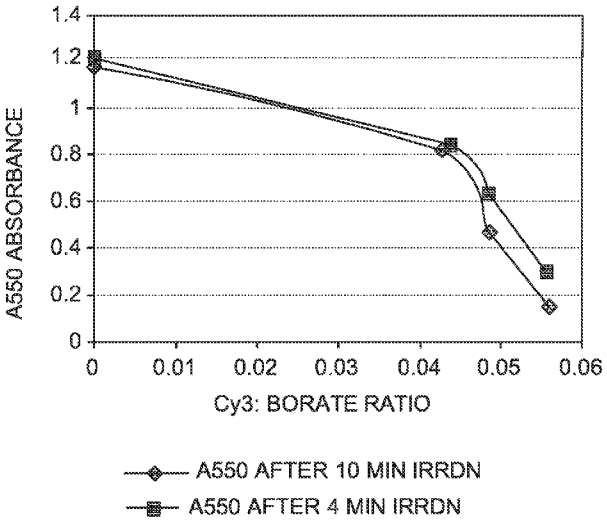
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[Continued on next page]

(54) Title: PHOTOACTIVATED CHEMICAL BLEACHING OF DYES

FIG. 1



(57) Abstract: Methods comprising the use of photoactivated chemical bleaching for detecting multiple targets in a biological sample are provided. The methods include the steps of providing a biological sample including multiple targets, binding at least one probe to one or more target present in the sample, and observing a signal from the probe. The method further includes the steps of contacting the sample comprising the bound probe with an electron transfer reagent and irradiating the sample, thereby initiating a photoreaction that substantially inactivates the probe by photoactivated chemical bleaching. The method further includes the steps of binding at least one probe to one or more target present in the sample, and observing a signal from the probe. The process of binding, observing and bleaching may be iteratively repeated.

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