ABSTRACT

The present invention relates to a water-based fluorescent ink for the purpose of measurement or judgment of the fluorescence emission in a visible light region by an excitation wavelength in a predetermined ultraviolet range, containing water, a coloring material dissolved or dispersed in water, and an organic solvent, having a plurality of fluorescent groups in the coloring material structure of the coloring material, and using a water-soluble coloring material having a sulfonic acid group as the water-soluble group in the state of a free acid, capable of improving the water resistance and the light resistance, dramatically increasing the content of the fluorescent coloring material in the ink, which has conventionally been included only by a small amount in the ink due to the concentration quenching problem, obtaining preferable fluorescence emission and water resistance of the recorded image, and providing preferable adhesion resistance to the recording medium of the coloring material and reliability.