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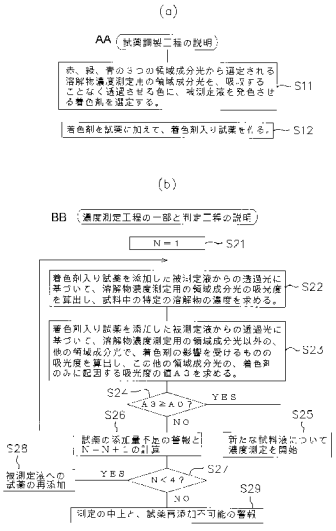
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(54) **Title**: METHOD FOR MEASURING DISSOLVED-SUBSTANCE CONCENTRATION

(54) 発明の名称 : 溶解物濃度の測定方法



S11 Selected is a colorant whereby a liquid to be examined is colored in a tint whereby a light component for dissolved-substance concentration measurement selected from light components within three regions, i.e , red, green, and blue, is permitted to pass without being absorbed.
S12 The colorant is added to a reagent to prepare colorant-containing reagent.
S22 On the basis of transmitted light passed through the liquid to be examined to which the colorant-containing reagent has been added, the absorbance of the light component for dissolved-substance concentration measurement is calculated to determine the concentration of a specific substance dissolved in the sample.
S23 On the basis of transmitted light passed through the liquid to be examined to which the colorant-containing reagent has been added the absorbance of another light component, which is not the light component for dissolved-substance concentration measurement and which is influenced by the colorant, is calculated to determine the absorbance A3 of said another light component which is attributable to the colorant only
S25 Start concentration measurement with respect to new sample liquid
S26 Alert for a shortage of reagent addition amount, and calculation of N=N+1
S28 Re-addition of the reagent to the liquid to be examined
S29 Stop of the measurement, and alert for impossibility of reagent re-addition
AA Explanation of reagent preparation step
BB Explanation of some of concentration measurement step and determination step

(57) **Abstract**: [Problem] To provide a method for measuring the concentration of a dissolved substance in a sample, wherein whether the amount of a reagent added to the sample is proper or not can be determined prior to the measurement. [Solution] Light including visible-region components is caused to pass through a sample liquid to be examined which has been colored by addition of a reagent thereto. The visible-region light among the resultant transmitted light is divided into approximately equal three portions to obtain light components respectively within three regions, i.e., red, green, and blue regions, and a light component for dissolved-substance concentration measurement is selected from the three light components. A colorant whereby the liquid to be examined is colored in a tint whereby the light component for dissolved-substance concentration measurement is permitted to pass without being absorbed is added to a reagent to prepare a colorant-containing reagent. On the basis of the transmitted light which has passed through the liquid to be examined to which the colorant-containing reagent has been added, the absorbance of the light component for dissolved-substance concentration measurement and the absorbance A3 of the light component in another region which is attributable to the colorant only are calculated. Whether the reagent has been added to the sample in a just necessary amount can be determined by comparing the absorbance A3 with a reference absorbance A0.

(57) 要約:

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— 国際調査報告（条約第 21 条(3)）

【課題】 試料中の溶解物の濃度を測定するに当たり、試料に添加された試薬の量が適正であるか否かの判定が可能な溶解物濃度の測定方法を提供する。 【解決手段】 試料への試薬の添加により発色した被測定液に、可視光域を含む光を透過させて、その透過光のうち、可視光域の光を略３分割して得られる、レッド、グリーン、ブルーの、３つの領域成分光の何れかから選定される溶解物濃度測定用の領域成分光を、吸収することなく透過させる色に、被測定液を発色させる着色剤を、試薬に加えて着色剤入り試薬を作る。つぎに、着色剤入り試薬が添加されている被測定液からの透過光に基づいて、溶解物濃度測定用の領域成分光の吸光度と、他の領域成分光の、着色剤のみに起因する吸光度Ａ３とを算出する。この吸光度Ａ３と基準の吸光度Ａ０とを比較することにより、試料中に試薬が必要量だけ添加されている否かの判定を行うことができる。