Title (en)

REVERSIBLE THERMAL RECORDING MEDIUM

Title (de)

UMKEHRBARES THERMISCHES AUFZEICHNUNGSMEDIUM

Title (fr)

SUPPORT D'ENREGISTREMENT THERMIQUE REVERSIBLE

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Application

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Abstract (en)

[origin: EP1609616A1] The present invention is a selective invention concerned with an improved reversible thermosensitive recording medium in which erasure failure at low temperature and low humidity and the color development failure at high temperature and high humidity due to the repetitive erasure and printing in an environment of actual use have been improved; stable quality can be provided; and high speed erasure can also be realized. An object of the present invention is to provide a reversible thermosensitive recording medium in which humidity does not affect color optical density and erasing optical density; high contrast is excellent; the occurrence of dents to the recording medium and the density change due to the repetitive use are less; durability is excellent; wherein it is also possible to perform erasure by a thermal head; and high speed erasure is excellent. <??>A reversible thermosensitive recording medium of the invention comprises: a reversible thermosensitive recording layer which comprises a reversible thermosensitive composition on a support, wherein the reversible thermosensitive composition comprises a an electron-donating coloring compound and an electron-accepting compound and is capable of forming a relatively coloring state depending on the difference of heating temperatures and/or the difference of cooling rates after heating, and wherein the electron-accepting compound is a phenol compound expressed by the general formula (1) below, and when the reversible thermosensitive recording medium is printed in an environment of 35 DEG C +/- 2 DEG C and at relative humidity from 70% to 90%, a color optical density is 0.80 or more and an erasing optical density is 0.15 or less; <CHEM> where, in the formula (1), 'n' represents an integer of 1 to 3 and 'X' represents a divalent group containing either N atoms or O atoms, 'R1' represents an aliphatic hydrocarbon group having 2 or more carbon atoms, which may have a substituents, and 'R2' represents an aliphatic hydrocarbon group having 1 to 14 carbon atoms. <IMAGE>

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