DISSOLUTION OF CARBONATE CRYSTALS IN CULTURAL HERITAGE

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A method for the removal of calcium carbonate crystals ($CaCO_3$) on surface of cultural heritage artworks, by means of treatment with a light source at a specific wavelength. The method is applicable to paintings, frescoes, prints, mosaics, sculptures, monuments.

Protection: International (PCT)

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INVENTION

Artworks are constantly subjected to deterioration mainly due to instability of the materials, water soluble salts, humidity, temperature conditions, atmospheric pollutants and biological action. Unwanted formation of $CaCO_3$ can occur, which contributes to artwork deterioration and toxic method can be necessary for its removal. In the present invention, the crystallised $CaCO_3$ on the surface of cultural heritage artworks is treated with a specific product and the crystals are irradiated by means of a light source at a specific wavelength. Thanks to this process, pH perceptibly decreases, and it causes the dissolution of $CaCO_3$ in a more precise and safe cleaning way.

ADVANTAGES

- More precise and safe cleaning process
- Less toxic method

APPLICATIONS

- Method for paintings, frescoes, drawings, prints, mosaics, historical monuments and buildings, as well as archaeological sites.

CONTACTS

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