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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

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David J. Kypos

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If the application for this patent was filed on or after June 8, 1995, the term of this patent begins on the date on which this patent issues and ends twenty years from the filing date of the application or, if the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121, or 365(c), twenty years from the filing date of the earliest such application ("the twenty-year term"), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b), and any extension as provided by 35 U.S.C. 154(b) or 156 or any disclaimer under 35 U.S.C. 253.

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(12) **United States Patent**
Kitamura

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(54) **PHOTOCATALYTIC COATING AND STEEL PLATE AND CANVAS COATED WITH THE SAME**

(75) **Inventor:** **Toru Kitamura, Osaka (JP)**

(73) **Assignee:** **Pialex Technologies Corp., Osaka (JP)**

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 252 days.

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(52) **U.S. Cl.** **428/339; 428/422; 428/457; 442/108; 442/118; 442/152**

(58) **Field of Classification Search** None
See application file for complete search history.

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(57) **ABSTRACT**

The present invention provides a photocatalytic coating which has a predetermined photocatalytic function and reduces hardening time after coating, and the hardened coated film is not dissolved due to photocatalytic function and has flexibility. The present invention also provides a photocatalytic coating in which NAFION® (registered trademark of DuPont) is used as an organic resin binder which is not dissolved due to a photocatalytic reaction and has flexibility after dry hardening, and provides steel plates and canvases are coated with said photocatalytic coating, wherein the coatings are not removed when the coated film is bent after coating.

12 Claims, No Drawings