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**United States Patent** [19]  
**Nguyen**

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[54] **THERMAL WATERLESS LITHOGRAPHIC PRINTING PLATES**

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WO 99/11467 3/1999 WIPO .

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[57] **ABSTRACT**

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[51] **Int. Cl.**<sup>7</sup> ..... **G06C 1/76**

[52] **U.S. Cl.** ..... **430/272.1; 430/275.1; 101/454**

[58] **Field of Search** ..... 430/270.1, 272.1, 430/275.1, 303; 101/454

The invention relates to thermal waterless lithographic printing plates comprising layers of inherent near infrared absorbing polymers for computer-to-plate and digital-offset-press technologies. More specially, this invention relates to thermal waterless lithographic printing plates, which can be imaged with near infrared laser light and which do not require post chemical processing step.

[56] **References Cited**

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More particularly, the present invention provides a thermal waterless printing plate suitable for near infrared laser imaging, said printing plate comprising:

- (i) a support substrate, and (ii) a composite top layer consisting of:
  - (a) a near infrared absorbing adhesion promoting layer applied to the support substrate and
  - (b) a near infrared absorbing ink repelling cross-linked silicone polymer layer.

**10 Claims, No Drawings**