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(57) Abstract :

Embodiments of the present disclosure relates to a coating material (102) to reduce the temperature of a surface through passive radiative cooling. In an aspect, the present disclosure discloses a coating material (102) to reduce the temperature of a surface through passive radiative cooling. The coating material (102) of surfaces may comprise a polymer matrix (104). The polymer matrix may be composed of thermoplastic polymer. The polymer matrix may be configured to enable passive radiative cooling from surfaces. The coating material of surfaces may further comprise pigments (106) of high infrared emissivity configured to coat the polymer matrix. The coating material of surfaces may further comprise additives (108) configured to enhance radiative cooling properties of the pigments. The coating material may enable passive radiative cooling of surfaces.

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