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Patent Search

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Abstract:

Abstract: The invention presented here is a thermal image processing system to analyse the quality of polymer modified road bitumen. The system is a thermal image processing system. A conveyor belt system is in place upon which the heated polymer modified road bitumen is poured. The conveyor belt is : A thermal imaging camera is placed on the top of the conveyor belt. The polymer modified road bitumen is heated to different temperatures before conveyor. At different temperatures, different material properties of polymer modified road bitumen can be obtained from the thermal images. The employing an ensemble machine learning based image processing software loaded in a high performance computing unit. The polymer modified road induction coil based electric heater before being released onto the conveyor. •The temperature of heated polymer modified road bitumen is measured. The quality of the polymer modified road bitumen is assessed employing the collected thermal images. A large set of thermal images are collected by machine learning based image processing software is trained.

Complete Specification

Claims:

- 1) A novel method for thermal image processing of polymer modified road bitumen employing conveyor belt mechanism and electric induction coil
- 2) As claimed in Claim 1, the employment of thermal camera based image processing of polymer modified road bitumen.
- 3) As claimed in Claim 1, the employment of conveyor belt for periodic scanning of batches of polymer modified road bitumen.
- 4) As claimed in Claim 1, the employment of ensemble machine learning based image processing technique for assessment of polymer modified road bitumen.
- 5) As claimed in Claim 1, the employment of electric induction coil heater to heat up polymer modified road bitumen in the feeder.

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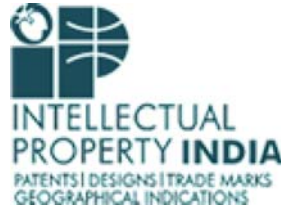




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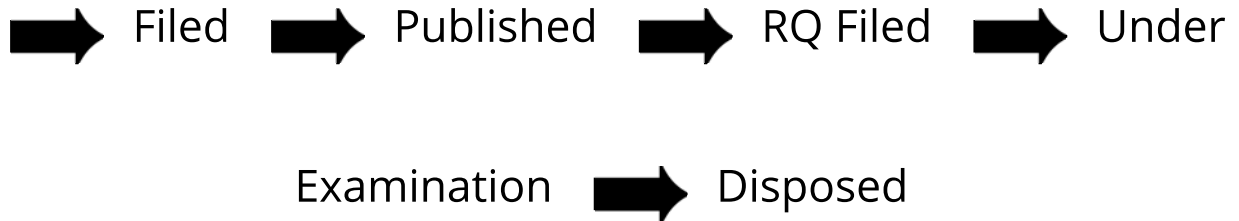
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APPLICATION STATUS

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