Application of Graphene in Tread Rubber Compound

TECHNOLOGY #S18007

Categories

Energy and Environment

Solution

- Optimize formulations using Graphene to get more improvement properties in terms of high abrasion resistance.
- The addition of graphene nanoplatelet can compensate for the reduction of carbon black while retaining other physical properties.

Technology & Applications

- Global tire manufacturers are using graphene within tire treads, walls and the inner linings can make tires lighter, better grip and reduce rolling resistance.
- Production of pre-cured tread liners rubber compound/flowers at large scale by incorporating small amount only of graphene in the formulation to enhance its strength.

Advantages

- Extended tire lifetime (wearability)
- More puncture abrasion and heat resistance
- Fulfill industrial demand to produce tires with specific functionality to be used in diverse climates or road conditions.

Intellectual Property

Patent: PI2022007372

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Gallery



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