A bitumen composition comprising a wax mixture consisting of a petroleum slack wax and a Fischer-Tropsch wax, the use of the wax mixture in bitumen compositions, the use of the bitumen composition in asphalt compositions, asphalt compositions comprising the bitumen composition and the method of producing asphalt pavements thereof.

The invention relates to a bitumen composition comprising a wax mixture consisting of a petroleum slack wax and a Fischer-Tropsch wax, the use of the wax mixture in bitumen compositions, the use of the bitumen composition in asphalt compositions, asphalt compositions comprising the bitumen composition and a method for producing asphalt pavements and constructions thereof.

Description of the prior art and object of the invention

Bitumen is a natural occurring or from the vacuum distillation of crude oil obtainable mixture of organic compounds with elastic-viscose properties. It is sticky, non-volatile, sealing and almost not-soluble in non-polar solvents.

Bitumen is used in a plurality of construction applications, such as coating of buildings, bitumen blanks etc. One of the most important applications is the use as binder for stone aggregates in asphalt for the paving of roads.

Asphalt is produced in large mixing plants with an output of 130 to 350 tons per hour. In this nowadays electronically controlled process the asphalt components are dosed, mixed and homogenized. At first the stone aggregate with a defined particle size and dosage is added to a drum drier. The moisture associated with the stones is evaporated and the required temperature is adjusted. Afterwards the aggregate is transferred into a tower, where the appropriate particle size distribution is produced. Then the hot bitumen and other additives are sprayed on to aggregate and thoroughly mixed with it using either a continuous drum mixer or pug mill batch mixer. At temperatures between 160 and 180° C the readily mixed asphalt can then be transported into silos or trucks to reach the building site, where it is needed and paved.