

Title (en)
PROCESS AND INSTALLATION FOR THERMAL CRACKING USED IN DECOMPOSING RUBBER AND PLASTIC WASTE

Title (de)
VERFAHREN UND VORRICHTUNG ZUM THERMISCHEN CRACKEN FÜR DIE ZERSETZUNG VON KAUTSCHUK- UND KUNSTSTOFFABFÄLLEN

Title (fr)
PROCEDE ET INSTALLATION DE CRAQUAGE THERMIQUE UTILISES POUR LA DECOMPOSITION DE DECHETS COMPOSES DE CAOUTCHOUC ET DE MATIERES PLASTIQUES

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Abstract (en)
[origin: WO2005021685A1] The invention relates to a thermal cracking process of decomposing rubber and plastic waste and to an installation for implementing this process. According to the invention, the process consists in that thermal decomposing of rubber and plastic waste of a dimension between 15 and 200 mm is made on the bases of its own energy by ebbing a part of the cracking oil thus obtained, which is used for heating the waste from the reactor and for reactor heating and pre-heating as well. According to the invention the installation consists of: a cracking reactor (1), equipped with a worm-gear shape mixer (15), with a vertical axis (23), an a driving-gear system (24,10,21) fixed on the cylindrical wall and on lower conical part of the reactor, an ebbing distribution unit (39,22), a heating space (2) where are placed two spiraled tubular pre-heaters (5) through the ebbing oil obtained after the thermal decomposing of rubber waste flows and some blades (4) for directing the burning products, on the outer wall of the reactor two burners (3) are tangentially disposed and a pipe for evacuation the burning products (26) which the ebbing pre-heater (27) is wrapped and in which the ebbing oil flows, on the upper part the reactor (1) being equipped with an evacuation pipe (6) through which the flow of matter obtained from the thermal decomposing of the waste is passed in a separation cyclone, which at its turn is coupling to a gases cooling-rectifying, gas scrubbing column and a gas condensing apparatus, the obtained products being directed to industrial use, and a part to ebbing and using in the technological process.

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Cited by
CN111286349A; CN109233349A

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