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CERTIFICATE OF GRANT INNOVATION PATENT

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Title of invention:

Plastics & Packing Materials Management: Plastics and Non-Recyclable Packing Materials Convert into a Value Added Products as Per Requirements

Name of inventor(s):

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Dated this 3rd day of March 2021

Commissioner of Patents

ABSTRACT

Our Invention “**Plastics & Packing Materials Management**” is a method produces a hydro carbonaceous fluid (a liquid mixture of hydrocarbons, or in other words a mixture of hydrocarbons which is liquid at ambient room temperature and atmospheric pressure), which functionally is a liquid hydrocarbon fuel, from a feed of waste plastic. The invented also a method comprises in broad embodiments the steps of: (step 1) melting a feed of substantially solid waste plastic in an aerobic atmosphere (for instance, air) whereby a waste-plastic melt is produced. (step 2) distilling at least a portion of the waste-plastic melt whereby a hydro carbonaceous distillate is produced; and (step 3) collecting the hydro carbonaceous distillate. The invented technology also includes the step of commutating the feed of substantially solid waste plastic into pieces substantially no greater than about 1.5 cm² prior to step 1 and the method includes the step of adding an effective amount of a cracking catalyst to the waste plastic prior to step 2. The invented technology involves stationary as well as, portable application in the form of a waste material recovery and conversion center/power plant, which is termed the Recovery Center and it has been created to replace the traditional unsanitary trash transfer station and its final repository the landfill and or city dump. The invented process also includes a is ecologically friendly reduces the nation's dependency on oil, and is politically acceptable and publicly embraced as a good neighbor business for any community and the process taught separates wet waste from dry waste and recyclables during the collection process and at the center via smart routing of refuse vehicles and progressive plant automation. The invented technology is also united loads are isolated by special bagging and dumped on a tipping floor at the Recovery center where multiple loads are divided into dry trash, office paper, co-mingle recyclables, cardboard and flat dry waste and the wet and dry waste are processed by an auger feeds as a consistent past quality fuel stock into either a gassifier reactors, or an incinerator steam boiler with stack and scrubbers to drive turbines and generators. The invented technology is also a waste to energy conversion other value added products are recovered from the waste stream and sold locally, nationally and internationally and a stationary Recovery Center is contained in a metal building structure and placed on a concrete slab, while the portable center is in modular form contained in containers and transported by road and or rail car to a permanent or temporary location for use. The invented method and process is also designed to give municipalities choices in the way they handle their waste, produce energy, use energy, develop employment from recovery manufacturing, and recapture valuable real estate from their legacy landfills.

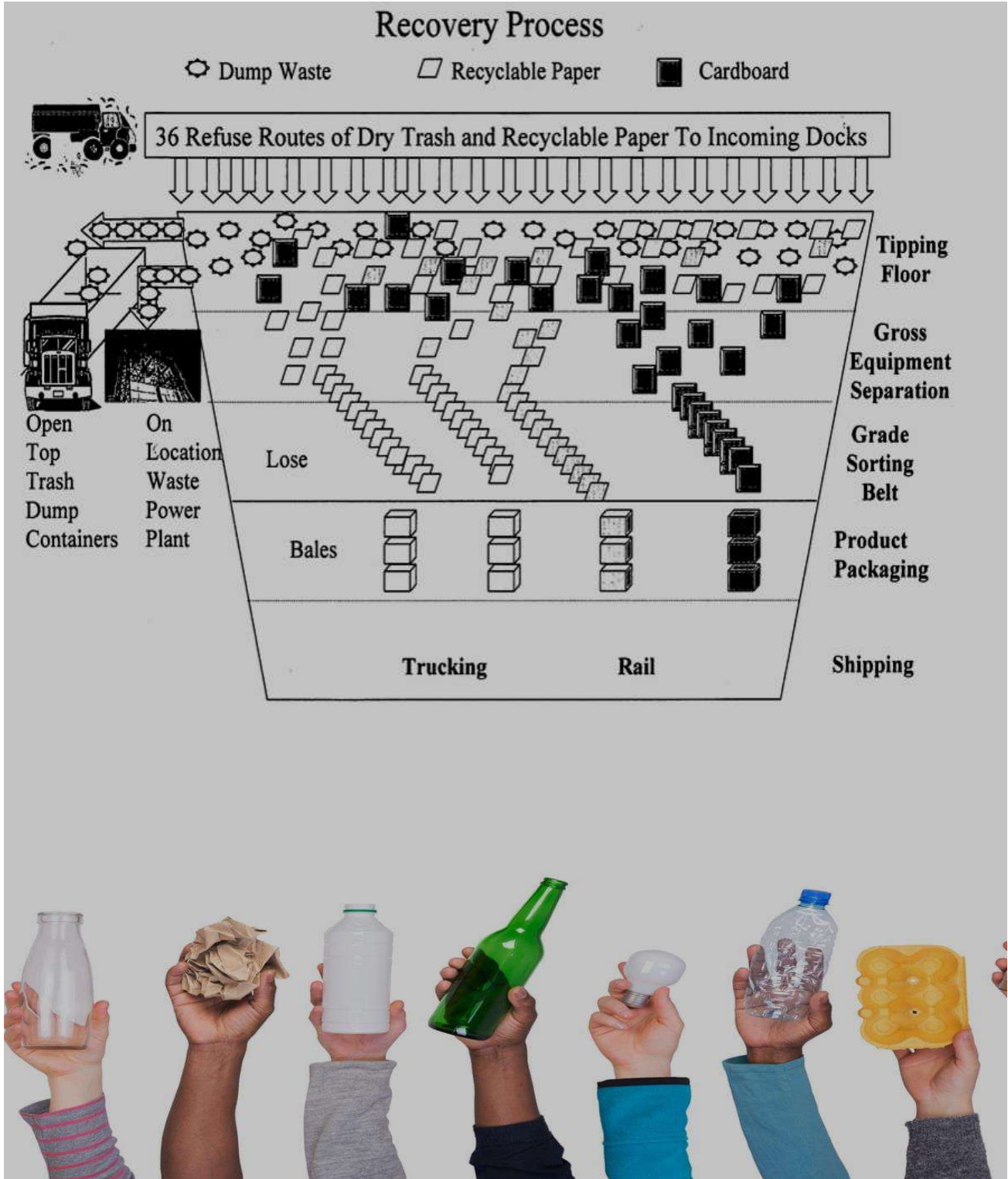


FIG. 1 The Routing & Recovery process

