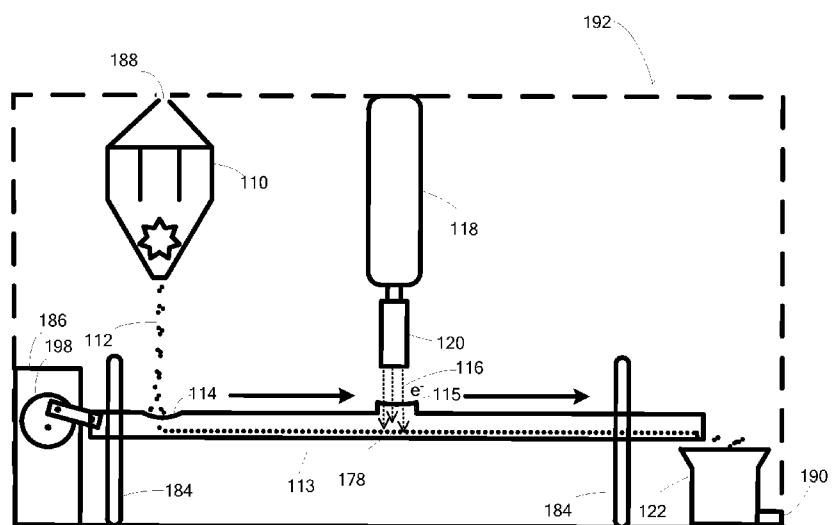




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(54) Title: PROCESSING BIOMASS



(57) Abstract: Methods and systems are described for processing cellulosic and lignocellulosic materials into useful intermediates and products, such as energy and fuels. For example, conveying systems, such as highly efficient vibratory conveyors, are described for the processing of the cellulosic and lignocellulosic materials. Provided herein is an apparatus for producing a treated biomass material, that includes an ionizing radiation source.

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