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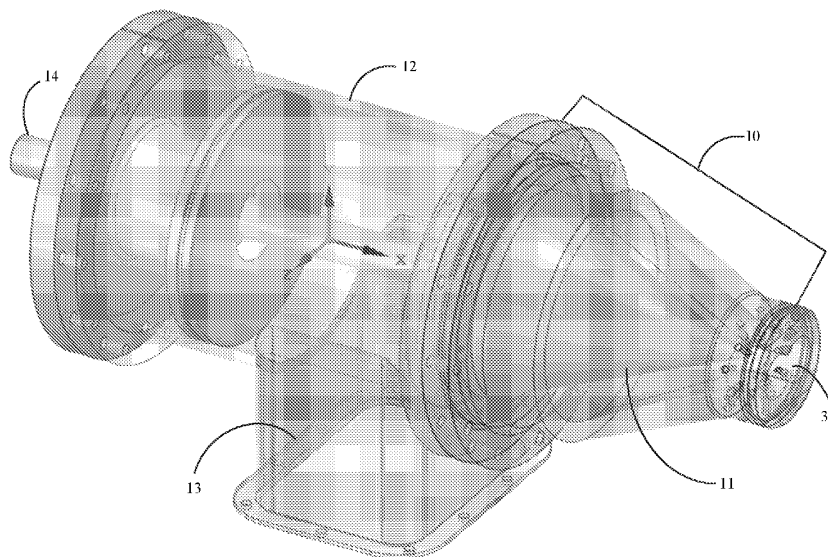
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(54) Title: PRESSURE VALVE ASSEMBLY

FIG. 1



(57) Abstract: A valve assembly having a conical valve needle axially displaceable in a bore of a valve body wherein a portion of the larger diameter of the valve needle seats downstream at an annular ring when the valve is closed. There is an open area between one end of the valve body to the annular ring even at closure and nozzles for the input of a liquid. The inner wall of the valve body comprises at least one opening for the entry of a liquid under pressure following output of a slurry or liquid from a tube or pipe. The valve assembly is particularly useful in maintaining a semi-continuous or continuous pressurized flow of biomass from an extruder.

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