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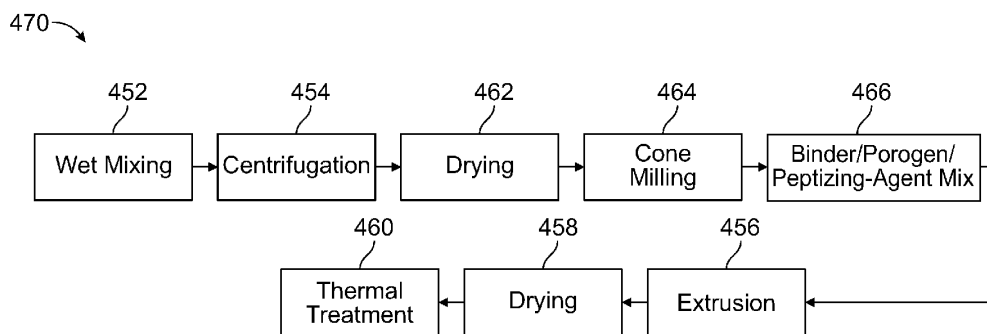


FIG. 4B

(57) Abstract: Methods and manufacturing processes for photocatalyst extrusion, extrudate photocatalysts, and photoreactor utilizing extrudate photocatalysts as a photocatalyst packed bed. An example method includes co-precipitating solutions to form a photocatalyst slurry, centrifugating and drying the slurry to form a dried powder, mixing the dried powder with a binder and a porogen and combining with a solvent to form a dough, feeding the dough through an extruder to create extrudates having a predetermined shape and cross-section, drying the extrudate, and thermally treating the extrudate after drying.

[Continued on next page]

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