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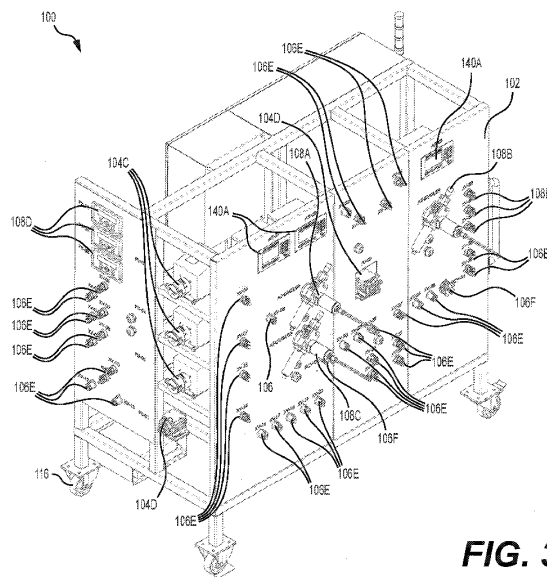


FIG. 3A

(57) **Abstract:** Systems and devices for producing biological products and methods of using the same are provided. An example univer-
sal skid includes a rigid support and a plurality of flow-channel hardware sets. Each flow-channel hardware set couples with a respective
flow channel of a plurality of flow channels for unit operations. The flow-channel hardware sets allow the flow channels to operate in
parallel or in series for continuous processing over the unit operations. An example modular assembly includes one or more single-use
kits for one or more unit operations and a universal skid coupled with the one or more single-use kits. An example manufacturing
system includes multiple modular assemblies coupled with each other allowing continuous processing within each modular assembly,
in between the modular assemblies, fully continuous processing across multiple unit operations.

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