

FIGURE 1
An Alkylation Unit with Catalyst Hydro-Regeneration, Hydrogen Recycle,
and Hydrogen Chloride Recovery

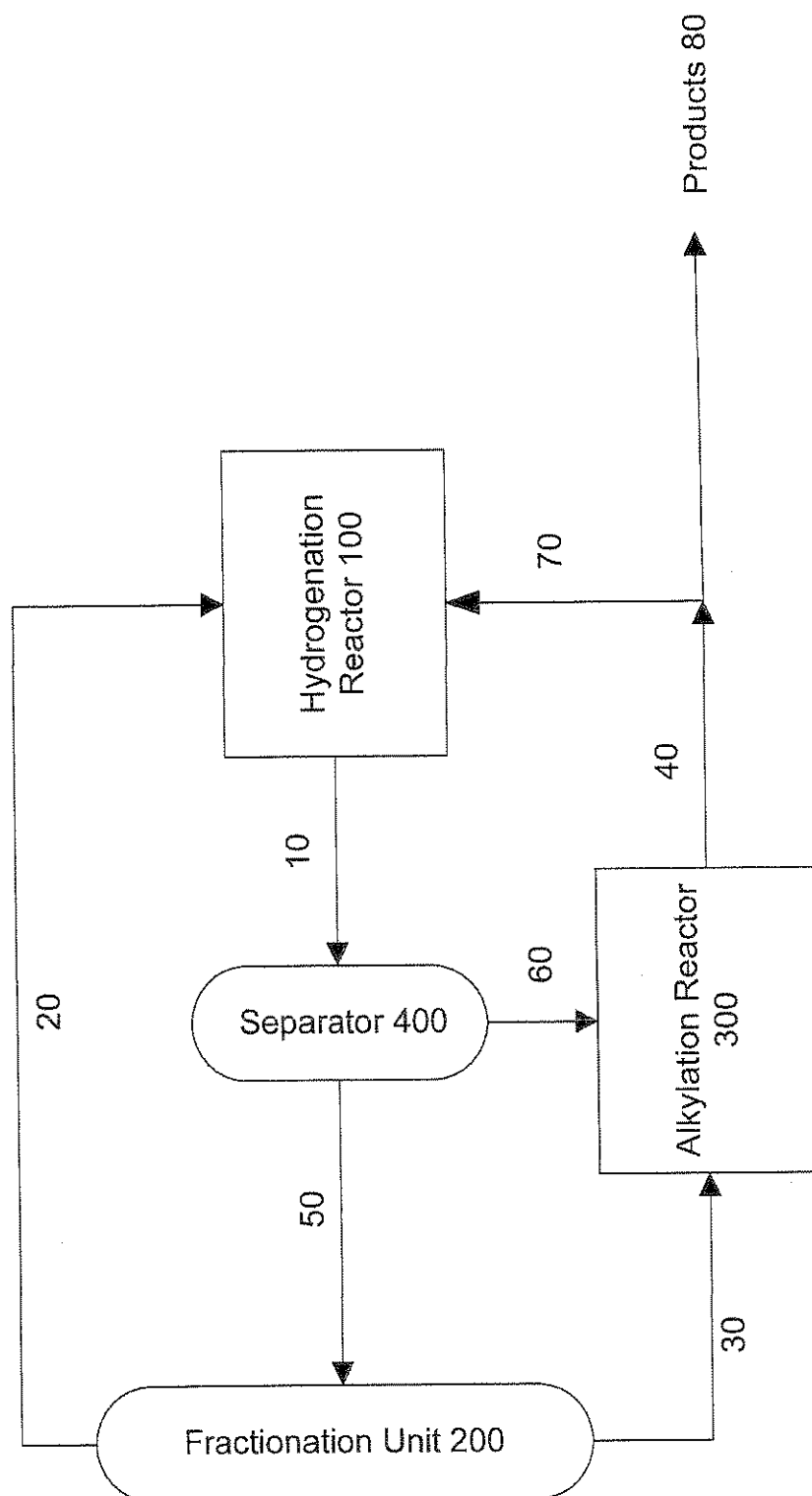


FIGURE 2
H₂ Recycle and HCl Recovery from Ionic Liquid Catalyst
Hydrogenation, Comparison Case

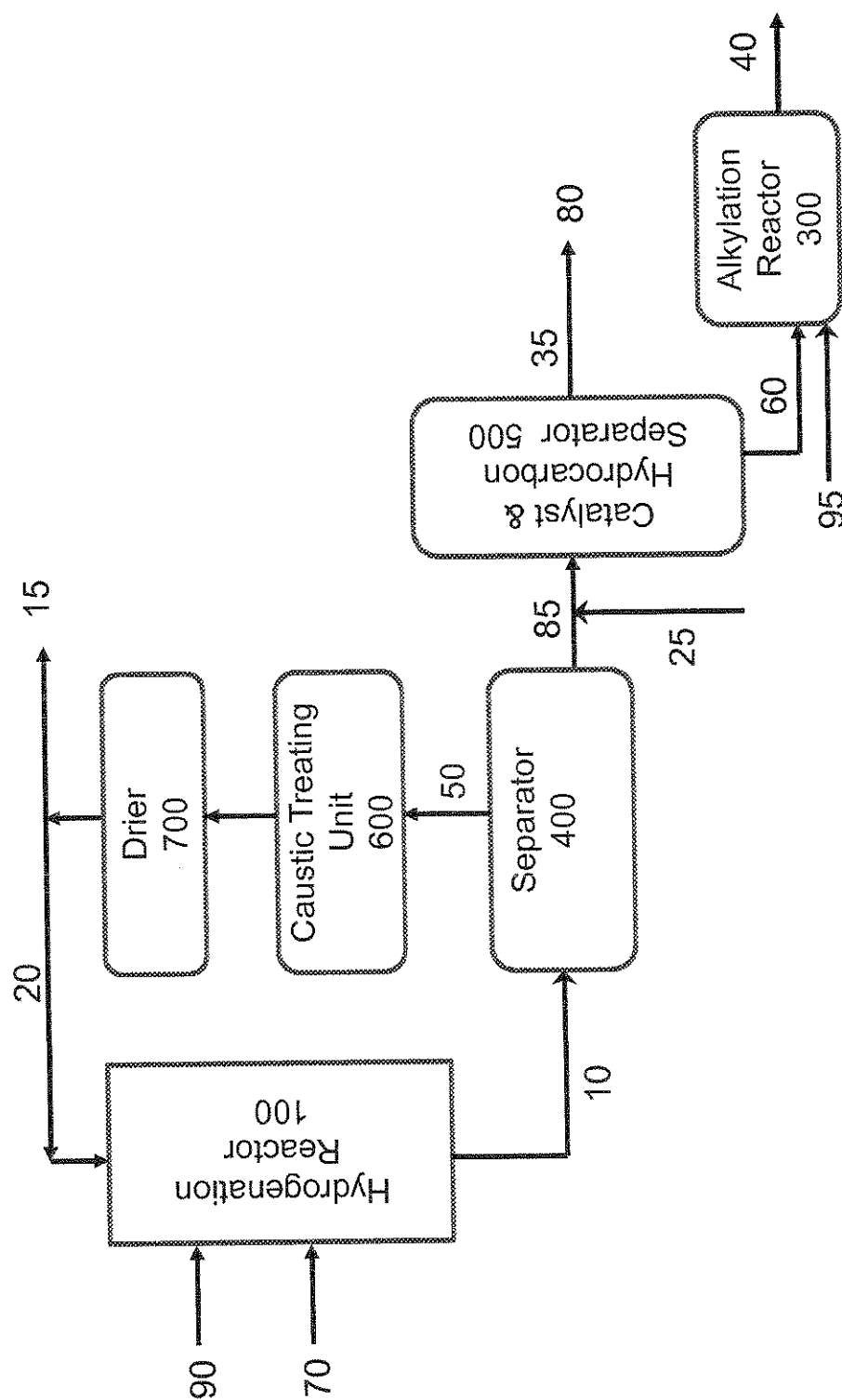


FIGURE 3
H₂ Recycle and HCl Recovery from Ionic Liquid Catalyst
Hydrogenation

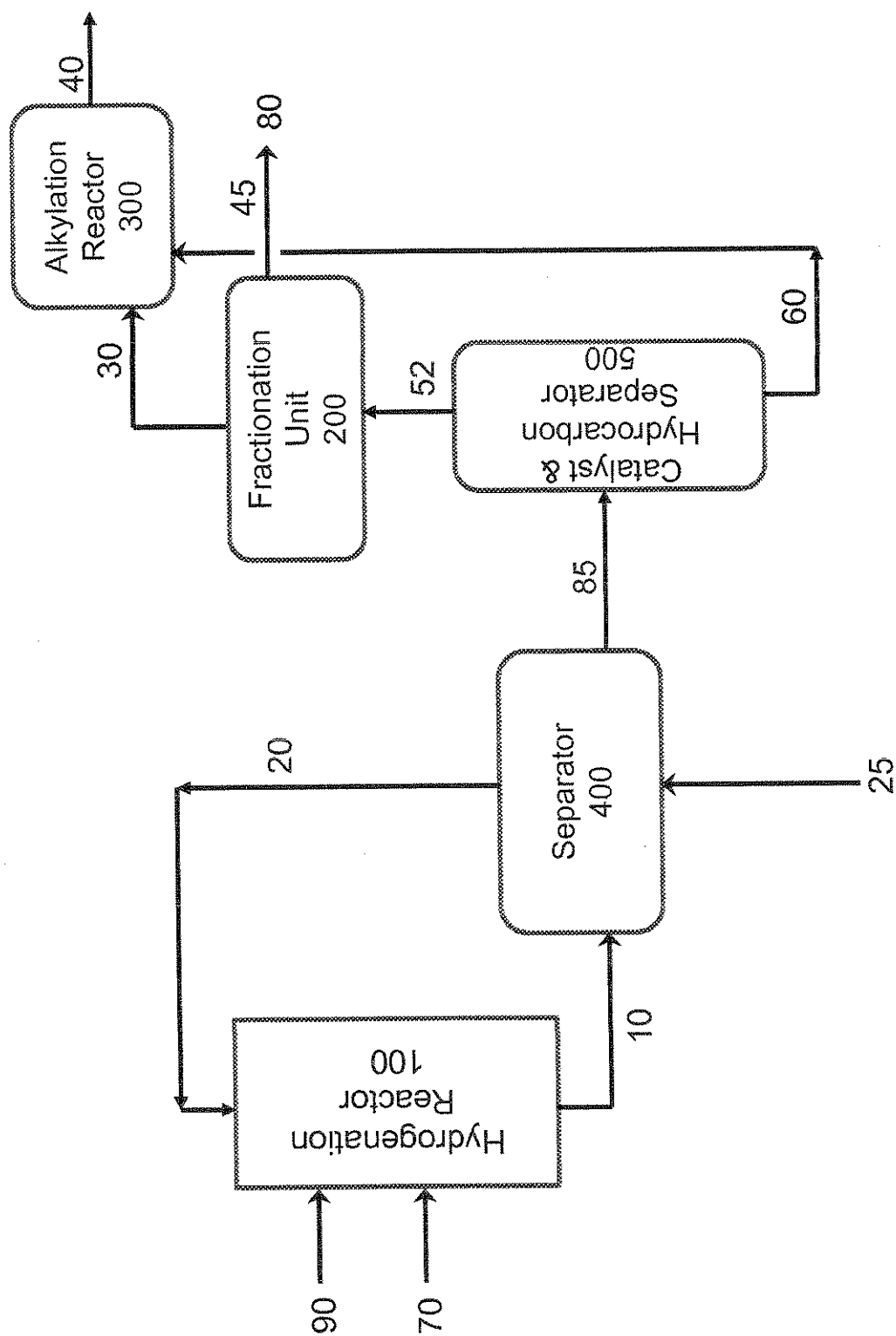


FIGURE 4
H₂ Recycle and HCl Recovery from Ionic Liquid Catalyst
Hydrogenation

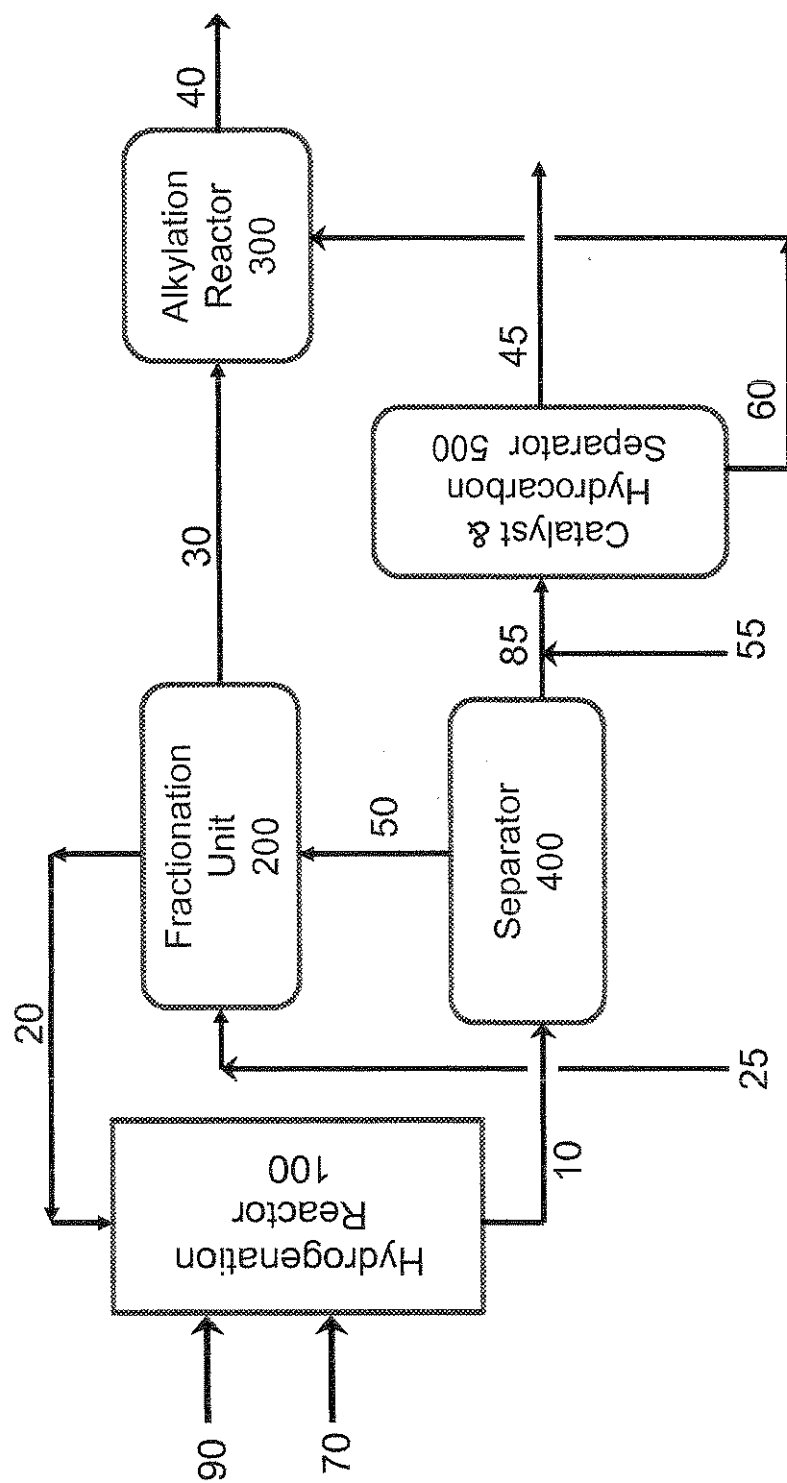


FIGURE 5
H₂ Recycle and HCl Recovery from Ionic Liquid Catalyst
Hydrogenation

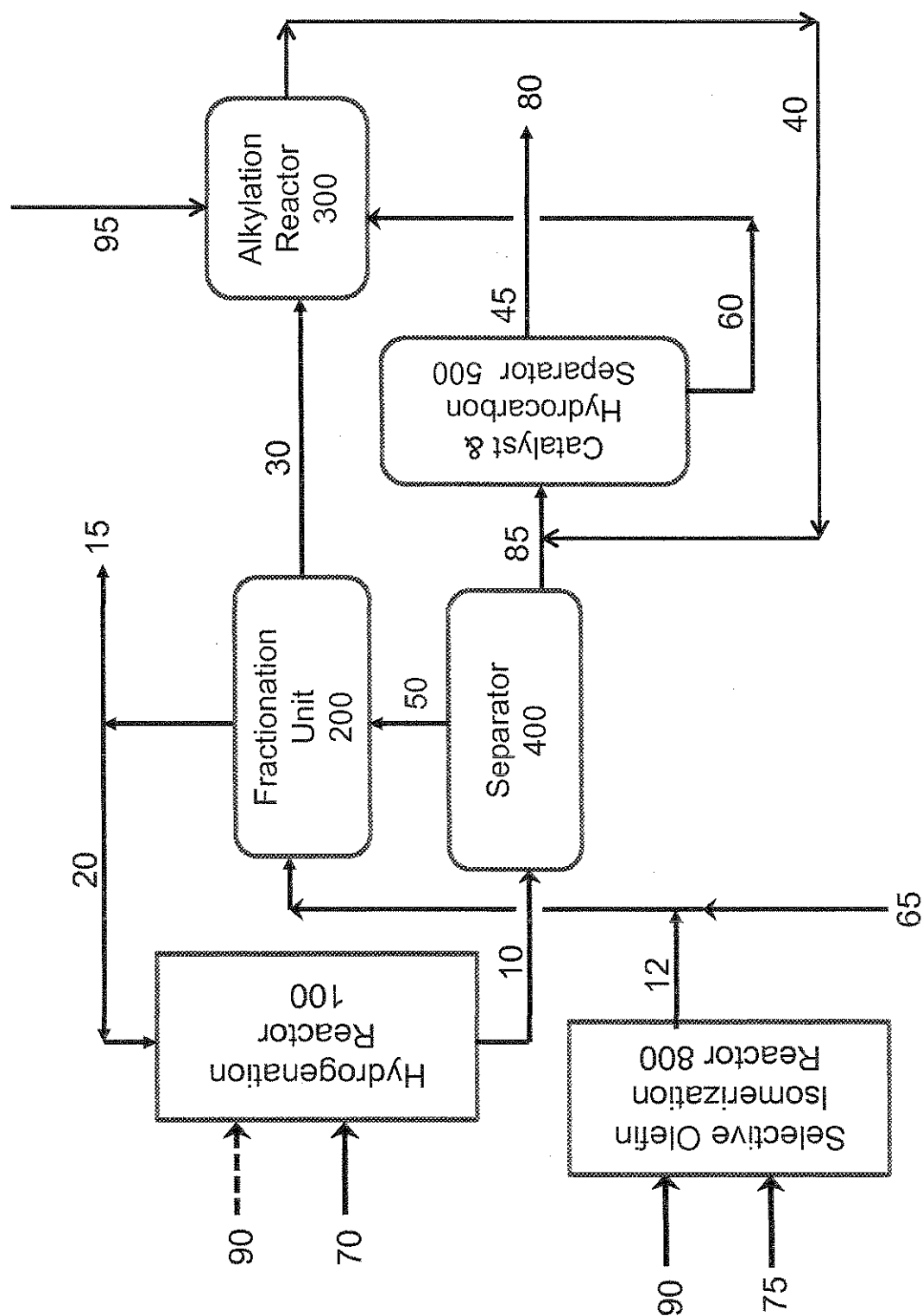


FIGURE 6
Hydro-regeneration Process Without Hydrocarbon Extraction
Solvent

