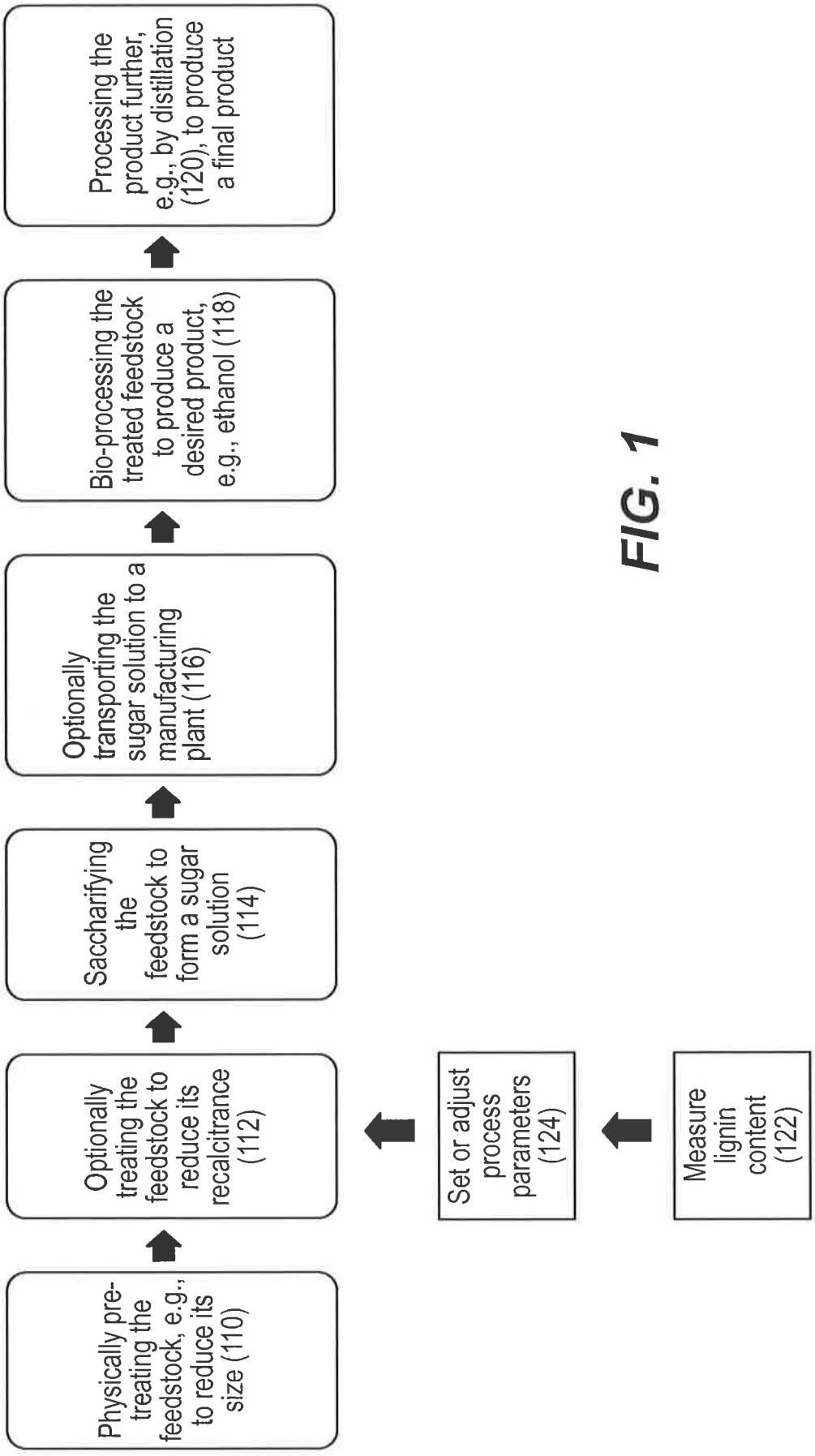

Physically pre-treating the feedstock, e.g., to reduce its size (110)
Optionally treating the feedstock to reduce its recalcitrance (112)
Set or adjust process parameters (124)
Measure lignin content (122)
Saccharifying the feedstock to form a sugar solution (114)
Optionally transporting the sugar solution to a manufacturing plant (116)
Bio-processing the treated feedstock to produce a desired product, e.g., ethanol (118)
Processing the product further, e.g., by distillation (120), to produce a final product

FIG. 1

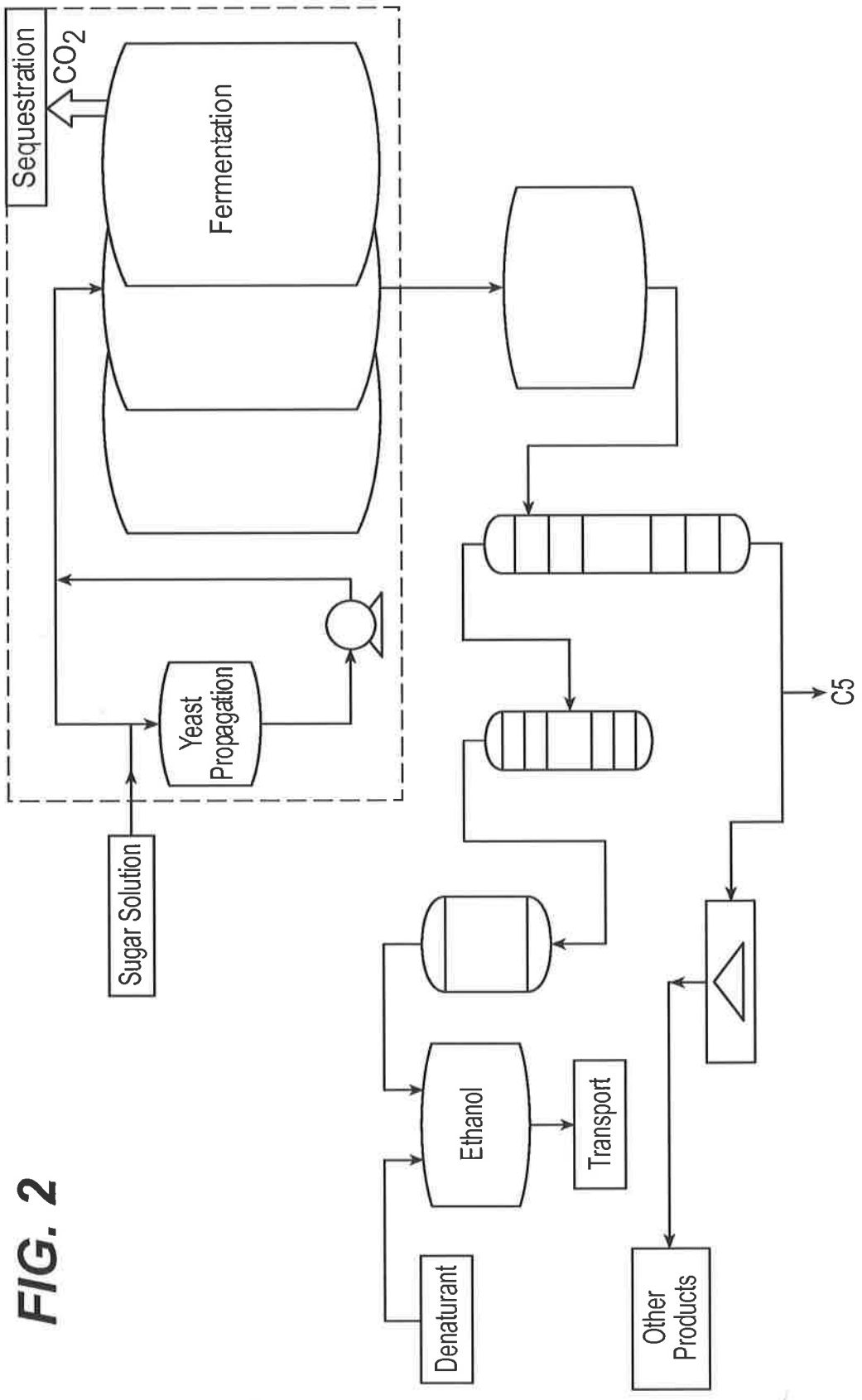

Sequestration
CO_2
Fermentation
Yeast Propagation
Sugar Solution
C5
Ethanol
Transport
Denaturant
Other Products

FIG. 2

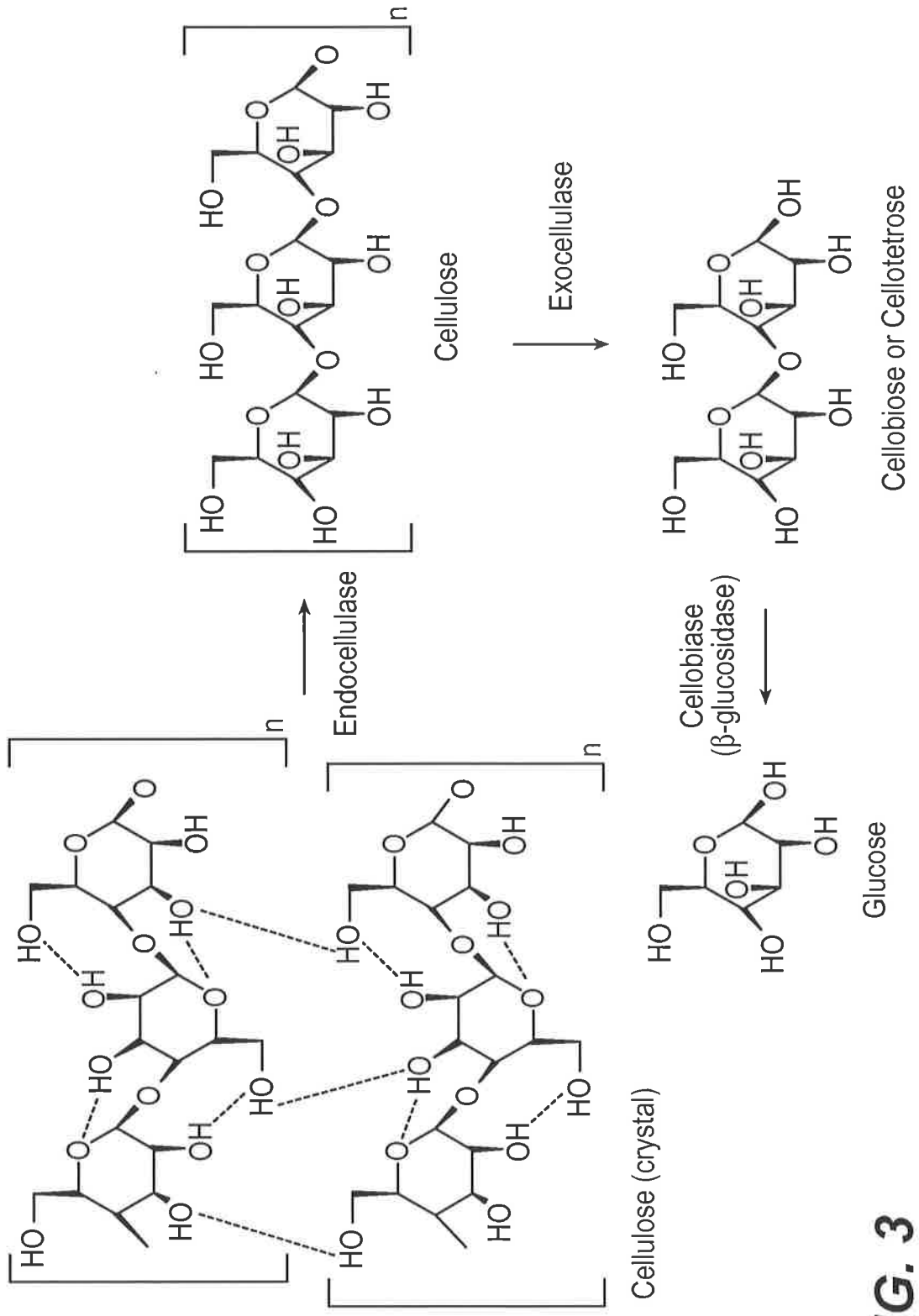

Cellulose (crystal)
Endocellulase
Cellulose
Exocellulase
Cellobiase
(β-glucosidase)
Cellobiose or Cellotetrose
Glucose

FIG. 3