

CRYOGENIC AIR SEPARATION APPARATUS**ABSTRACT**

5 [Summary]

[Problem] The aim lies in providing a cryogenic air separation apparatus capable of recovering nitrogen, argon and high-purity oxygen at a high yield.

10 [Solution] A cryogenic air separation apparatus comprises: a heat exchanger 1, a first rectification column 2, a first condenser 3, a second rectification column 5, a third rectification column 6, a second condenser 7, a high-purity oxygen rectification column
15 8, a third condenser 4, a nitrogen compressor 10, and a compressed recycled gas line L52 for introducing product nitrogen gas compressed by the first nitrogen compressor 10 into a warm end (heat source) of an ultra-high-purity oxygen vaporizer 9 as a compressed
20 recycled gas.

[Fig. 1]