

ABSTRACT

5 A multi-refrigeration-cycle apparatus capable of reducing an installation area for
equipment installed in a sub-fab and capable of shortening a pipe for delivering a cooling
medium to a semiconductor-device manufacturing equipment is disclosed. The multi-
refrigeration-cycle apparatus includes: a first refrigeration cycle having a first refrigerant for
performing heat exchange with a cooling medium for cooling the semiconductor-device
10 manufacturing equipment, the first refrigerant circulating in the first refrigeration cycle; and
a second refrigeration cycle having a second refrigerant for performing heat exchange with
the first refrigerant, the second refrigerant circulating in the second refrigeration cycle. At
least a part of the first refrigeration cycle is arranged in a clean room where the
semiconductor-device manufacturing equipment is installed, and the second refrigeration
15 cycle is arranged in a sub-fab.

FIG.1