

Capture system of carbon dioxide from a gas containing carbon dioxide**ABSTRACT**

The invention relates to a system (1) for capturing carbon dioxide within gas loaded
5 with carbon dioxide, comprising a first heat exchanger (4a) and a second heat exchanger
(4b), each of the heat exchangers (4, 4a, 4b) comprising a chamber (14, 14a, 14b), a first
pass (12a) and a second pass (12b), the chamber (14, 14a, 14b) being passed through by
a carbon dioxide-loaded gas flow (2) and, in order to capture by desublimation the
carbon dioxide present in said carbon dioxide-loaded gas flow (2) with a view to
10 generating a decarbonated gas flow (3), the capture system (1) is configured to cause the
decarbonated gas flow (3) from either of the two chambers (14, 14a, 14b) to circulate
within the first pass (12a) and/or within the second pass (12b) of at least one of the two
heat exchangers (4, 4a, 4b).

Figure of the abstract: figure 1