

Title (en)
Air-cooled vacuum steam condenser.

Title (de)
Luftgekühlter Dampfkondensator mit Vakuum.

Title (fr)
Aérocondenseur de vapeur à vide.

Publication
EP 0346848 A2 19891220 (EN)

Application
EP 89110718 A 19890613

Priority
US 20609588 A 19880613

Abstract (en)

An improved air-cooled vacuum steam condenser in a steam turbine cycle comprising a turbine (14) for generating mechanical power, a boiler (12) for generating steam, a conduit arrangement coupling the boiler (12) to the turbine (14) and then another conduit arrangement coupling the turbine exhaust back to the boiler (12) through steam condensing mechanisms. The steam condensing mechanisms include a plurality of finned tubes (32) through which the expanded exhaust steam may flow counter to its condensate and be condensed; a plurality of front headers (34) at the lower ends of the condensing tubes for conveying the exhaust steam from the turbine (14) and receiving the condensate from the finned tubes (32); a plurality of rear headers (36, 38, 40, 42) at the upper ends of the condensing tubes (56) for receiving the non-condensable gasses; and means in the rear headers to remove non-condensable gasses from the rear headers (36, 38, 40, 42).

IPC 1-7
F28B 1/06; F28B 9/10

IPC 8 full level
F28B 1/06 (2006.01); **F28B 9/10** (2006.01)

CPC (source: EP)
F28B 1/06 (2013.01); **F28B 9/10** (2013.01)

Cited by
WO2017223185A1; CN110494712A; KR20190087398A; RU2767122C2; KR20190020739A; AU2017280203B2; KR20220100094A;
WO2017223139A1; US10527354B2; US10551126B2; US11112180B2; US11662146B2; EP3287732A1; WO2018037043A1; US10024600B2;
US11486646B2

Designated contracting state (EPC)
BE DE ES FR GB IT

DOCDB simple family (publication)
EP 0346848 A2 19891220; EP 0346848 A3 19900214; EP 0346848 B1 19940223; DE 68913233 D1 19940331; DE 68913233 T2 19940908;
ZA 894479 B 19900725

DOCDB simple family (application)
EP 89110718 A 19890613; DE 68913233 T 19890613; ZA 894479 A 19890613