

Title (en)
PROCESS FOR IMPROVING EFFICIENCY IN THERMAL POWER STATIONS WITH SERIES-CONNECTED CONDENSERS ON THE COOLING WATER SIDE

Title (de)
VERFAHREN ZUR WIRKUNGSGRADVERBESSERUNG IN WÄRMESKRAFTWERKEN MIT KÜHLWASSERSEITIG IN REIHE GESCHALTETEN KONDENSATOREN

Title (fr)
PROCEDE PERMETTANT D'AMELIORER LE RENDEMENT DE CENTRALES THERMIQUES A L'AIDE DE CONDENSEURS MONTES EN SERIE COTE EAU DE REFRROIDISSEMENT

Publication
EP 0719378 A1 19960703 (DE)

Application
EP 95925677 A 19950707

Priority

- DE 9500860 W 19950707
- DE 4424870 A 19940714

Abstract (en)
[origin: WO9602736A1] In a process in thermal power stations in which condensers (1a, 1b) are connected in series on the cooling water side to improve efficiency, it is proposed that, with excessively low cooling water inlet temperatures, when the improved efficiency is lost through sub-critical pressure ratios, part of the flow of cooling water adjustable, e.g. using a regulating device (13), be diverted before entering the first condenser (1a) via a by-pass line (12), by-pass said condenser (12) and be remixed with the partial cooling water flow before entering the condenser (1b) through which it has yet to pass. The process of the invention can also be extended to other condensers in order to ensure that there is no obstruction in the flow profile in the allocated turbines or partial turbines owing to the pressure ratios arising in the by-passed and subsequent condensers. The advantage of the improved efficiency is thus retained even with excessively low cooling water inlet temperatures and the pressure ratios in the unby-passed condensers remain virtually unaffected. The ratio between by-pass partial flow and cooling water partial flow is adequately adjusted or controlled depending on the actual cooling water outlet temperature.

IPC 1-7
F01K 9/00; **F28B 7/00**

IPC 8 full level
F01K 9/00 (2006.01); **F28B 7/00** (2006.01)

CPC (source: EP)
F01K 9/003 (2013.01)

Citation (search report)
See references of WO 9602736A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9602736 A1 19960201; AT E166427 T1 19980615; AU 2973995 A 19960216; DE 4424870 A1 19960118; DE 59502250 D1 19980625; DK 0719378 T3 19990125; EP 0719378 A1 19960703; EP 0719378 B1 19980520

DOCDB simple family (application)
DE 9500860 W 19950707; AT 95925677 T 19950707; AU 2973995 A 19950707; DE 4424870 A 19940714; DE 59502250 T 19950707; DK 95925677 T 19950707; EP 95925677 A 19950707