Title (en)
Process for operating a thermal power station with condensers connected in series on the coolimg water side

Title (de)
Verfahren zum Betrieb von Wärmekraftwerken mit kühlwasserseitig in Reihe geschalteten Kondensatoren

Title (fr)
Procédé d'opération de centrales thermiques à l'aide de condenseurs montés en série cÔté eau de refroidissement

Publication
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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 un-by-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.

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