Abstract

In the preparation of ethylene oxide by direct oxidation of ethylene with air or oxygen using water as heat carrier to dissipate the heat of reaction, with water vapor being formed, a process for optimizing the specific energy consumption is proposed. In this, the water vapor is first expanded in one or more backpressure steam turbine(s) T for operating working machines M, before it is fed to one or more consumers, such as bottoms reboilers or steam injectors, for further utilization.

Fig. 1