

Title (en)  
METHOD FOR MELTING GLASS

Title (de)  
GLASSCHMELZVERFAHREN

Title (fr)  
PROCEDE DE FUSION DU VERRE

Publication  
**EP 2462067 A1 20120613 (FR)**

Application  
**EP 10739370 A 20100805**

Priority  
• EP 09167389 A 20090806  
• EP 2010061396 W 20100805  
• EP 10739370 A 20100805

Abstract (en)  
[origin: EP2281785A1] The glass melting furnace (12) comprises burners (13), and a ceramic membrane for separating oxygen (14) from a gas mixture. Combustion energy is partially produced by oxy-combustion during heating. The flow of oxygen supplied to the burner is regulated by characteristics including temperature, pressure and flow of the gas mixture. The oxygen separation is carried out at 600-950[deg] C under a pressure of  $1 \times 10^{-6}$  Pa. The flow of oxygen is determined by a difference in an amount of oxygen in the gas mixture before extraction and amount of oxygen in the gas mixture after extraction. The glass melting furnace (12) comprises burners (13), and a ceramic membrane for separating oxygen (14) from a gas mixture. Combustion energy is partially produced by oxy-combustion during heating. The flow of oxygen supplied to the burner is regulated by characteristics including temperature, pressure and flow of the gas mixture. The oxygen separation is carried out at 600-950[deg] C under a pressure of  $1 \times 10^{-6}$  Pa. The flow of oxygen is determined by a difference in an amount of oxygen in the gas mixture before extraction and amount of oxygen in the gas mixture after extraction. The measure of amount of oxygen in the gas mixture after extraction is carried out using a probe type ceramic oxide electrode. The supply of oxygen to the burner is assisted by an additional oxygen unit with a tank. The additional supply of oxygen is carried out by direct injection in the burner so as to maintain the burner during an interruption of supply of oxygen extracted on the membrane.

IPC 8 full level  
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CPC (source: EP US)  
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Citation (search report)  
See references of WO 2011015618A1

Citation (examination)  
• US 5984667 A 19991116 - PHILIPPE LOUIS C [US], et al  
• US 2010205968 A1 20100819 - GRAEBER CARSTEN [DE], et al  
• US 5753007 A 19980519 - RUSSEK STEVEN LEE [US], et al

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