

Title (en)

Flare stack and method of flaring waste gas.

Title (de)

Fackelkamin und Verfahren zum Abfackeln von Abgas.

Title (fr)

Torche à gaz et procédé pour brûler du gaz résiduel.

Publication

**EP 0039376 A1 19811111 (EN)**

Application

**EP 80301449 A 19800502**

Priority

EP 80301449 A 19800502

Abstract (en)

In a flare stack system for the flaring of waste gases, in which the flare stack (10) is equipped with the steam injection parts (16, 18, 20), such as nozzles (20) or manifolds (16), adjacent the flame zone (12) at the outlet end of the stack, means are provided for alternate injection of air (32) from the blower (42) or live steam (50) through the steam injection parts. The alternate flow is controlled by two pneumatically controlled valves (36, 48) in the blower air line (32) and the other in the steam line (50), such that when one valve is closed, the other is open, and vice versa. The objective of the alternate supply of air and steam is for the purpose of cooling the steam injection parts when the full flow of steam is not required, because there is no waste gas flow or only a minimal gas flow. In that case, the heat of the maintenance gas flow may be sufficient to injure the steam injection parts, which must be cooled by passage of a gas through them. When the ambient temperature is below freezing a small flow of steam is unsatisfactory since it readily condenses to liquid, and can form ice over the parts of the main gas flow outlets, etc. In this condition, air at low pressure is used to cool the parts and when the gas flow is large, the two valves are switched, the air is cut off and the full steam flow is initiated.

IPC 1-7

**F23D 13/20**; **F23G 7/06**

IPC 8 full level

**F23G 7/08** (2006.01); **F23L 7/00** (2006.01)

CPC (source: EP)

**F23G 7/085** (2013.01); **F23L 7/005** (2013.01)

Citation (search report)

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