

Title (en)

Method of anti-surge protection for a dynamic compressor using a surge parameter

Title (de)

Verfahren zum Schutz vor Verdichterpumpen für einen dynamischen Kompressor mithilfe eines das Verdichterpumpen charakterisierende Parameters

Title (fr)

Procédé de protection contre le pompage d'un compresseur dynamique à l'aide d'un paramètre caractérisant le pompage

Publication

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Application

EP 11165767 A 20110511

Priority

US 77744510 A 20100511

Abstract (en)

[origin: EP2386762A1] A method of surge protection for a dynamic compressor (10) that has a corresponding compressor map (32). A control system (24) continually calculates an equivalent polytropic head parameter in order to define a surge limit line (38). The system then calculates a control parameter and determines the distance of the control parameter to the surge limit line (38), wherein the control parameter is dynamic to changes in compressor load and invariant to changes in suction conditions and gas compressibility. As a result of the distance of the control parameter to the surge limit line (38), the surge valve (20) of a dynamic compressor (10) is actuated to prevent surge.

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