

Title (en)  
Industrial chimney with forced draught.

Title (de)  
Industrieschornstein mit erzwungenem Zug.

Title (fr)  
Perfectionnements aux cheminées industrielles à tirage forcé.

Publication  
**EP 0040166 A1 19811118 (FR)**

Application  
**EP 81420072 A 19810508**

Priority  
FR 8010971 A 19800509

Abstract (en)  
[origin: US4380189A] A chimney comprises a central column through which the combustion gases or the like are forced, this column terminating at its upper end in a nozzle of smaller cross-section, and an outer wall which surrounds the column while leaving an annular intermediate space into which air is forced under a pressure slightly above the pressure of the combustion gases within the central column, this outer wall joining the periphery of the column in the zone of the upper nozzle. Apertures are provided in the wall of the column just below the nozzle to connect the annular space and the inside of the column. Air is thus introduced centripetally into the stream of combustion gases, a part of this air becoming progressively mixed with the said gases while another part forms a protective thermally insulating sleeve around the jet of these gases which issues from the nozzle, thus delaying the condensation of water droplets and the formation of a white cloud, which therefore only appears at a substantial height above the top of the chimney.

Abstract (fr)  
La cheminée comporte une colonne centrale (1) entourée par une paroi extérieure (2) délimitant un espace annulaire (3) qui communique avec l'intérieur de (1) par des ouvertures (4) juste à la base d'une tuyère de sortie (1a). Les gaz de combustion du four (5) sont envoyés sous pression dans (1) par un ventilateur (5) tandis que l'air est refoulé dans (3) par un autre ventilateur (9). Un mano-comparateur (10) maintient la pression dans (3) légèrement supérieure à celle régnant dans (1) de sorte que l'air se mélange en partie au gaz à évacuer en les entourant d'une gaine qui retarde les phénomènes de condensation et de diffusion dans l'atmosphère environnante.

IPC 1-7  
**F23L 17/00**; **F23J 13/02**

IPC 8 full level  
**F23L 17/02** (2006.01); **F23J 13/02** (2006.01); **F23L 17/00** (2006.01)

CPC (source: EP US)  
**F23J 13/025** (2013.01 - EP US); **F23L 17/00** (2013.01 - EP US); **F23J 2900/15004** (2013.01 - EP US)

Citation (search report)

- FR 1350587 A 19640124
- [A] FR 2122026 A5 19720825 - ANVAR
- [A] DE 2730582 A1 19790111 - BORSIG GMBH
- [A] FR 1056616 A 19540301

Cited by  
EP3147565A1; FR2551188A1; FR3041689A1

Designated contracting state (EPC)  
BE CH DE GB IT NL SE

DOCDB simple family (publication)  
**EP 0040166 A1 19811118**; **EP 0040166 B1 19840822**; AU 544279 B2 19850523; AU 7021981 A 19811112; BR 8102873 A 19820202; CA 1150927 A 19830802; DE 3165652 D1 19840927; DE 40166 T1 19830915; FR 2482261 A1 19811113; FR 2482261 B1 19850726; IN 151733 B 19830716; JP H0114486 B2 19890313; JP S572923 A 19820108; US 4380189 A 19830419; ZA 813012 B 19820526

DOCDB simple family (application)  
**EP 81420072 A 19810508**; AU 7021981 A 19810507; BR 8102873 A 19810508; CA 376700 A 19810501; DE 3165652 T 19810508; DE 81420072 T 19810508; FR 8010971 A 19800509; IN 472CA1981 A 19810506; JP 7005981 A 19810508; US 26044281 A 19810504; ZA 813012 A 19810506