

Title (en)  
Combustor and combustion apparatus.

Title (de)  
Brennkammer und Verbrennungsvorrichtung.

Title (fr)  
Chambre de combustion et appareil à combustion.

Publication  
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Application  
**EP 91308745 A 19910925**

Priority  
JP 25640490 A 19900926

Abstract (en)  
A combustor has a premixing type combustion burner (30) which has an atomizer (40) for ejecting a liquid fuel together with combustion air to atomize the liquid fuel. The atomizer is comprised of an inner shell (45) to an inner peripheral surface of which the liquid fuel is supplied, an outer shell (41) defining a passage for the combustion air running substantially straight between the outer shell itself and an outer peripheral surface of the inner shell, and a swirling-flow guide plate (50) for swirling the combustion air passed into the inner shell, while directing it in a downstream direction. The combustor further includes a resistor (35) abruptly decreased in sectional area downstream and provided substantially downstream of the center of the swirling flow and in the vicinity of an outlet of the premixing type combustion burner for providing a resistance to a premixture ejected from the premixing type combustion burner. <IMAGE>

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Cited by  
EP0913631A3; FR2765952A1; CN110199153A; CN111473365A; EP0660038A3; US5647538A; EP0692674A3; EP0675322A3; US11460188B2; US10808927B2; US10823401B2; US10359213B2; DE102007009922A1; US10386062B2; WO9739284A1; WO2018160856A1; WO9830841A1; US11906160B2; US9429324B2; US9366442B2; US11415316B2

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