

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANDREW C. NGUYEN and RANDEL L. HOSKINS

Appeal No. 95-0916
Application 07/803,530¹

HEARD: September 15, 1997

Before MEISTER, ABRAMS and FRANKFORT, ***Administrative Patent Judges***.

MEISTER, ***Administrative Patent Judge***.

¹Application for patent filed December 9, 1991.

DECISION ON APPEAL

Andrew C. Nguyen and Randel L. Hoskins (the appellants) appeal from the final rejection of claims 1-6, the only claims present in the application.²

The appellants' invention pertains to a gas generator utilized in an automobile air bag inflator. Independent claim 1 is further illustrative of the appealed subject matter and reads as follows:

1. A gas generator comprising,
 - a generator housing;
 - a propellant container disposed internally of said housing having a plurality of container apertures therein;
 - a propellant in said propellant container;
 - means in said gas generator housing communicating with said propellant container for igniting said propellant;
 - a baffle enclosure disposed about said propellant container in spaced relation thereto so as to define a plenum therebetween, said baffle enclosure having a plurality of localized baffle apertures for the discharge of gas therefrom;

² Independent claims 1 and 6 have been amended subsequent to final rejection.

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said generator housing being disposed about
said baffle enclosure in
spaced relation thereto
and having a plurality
of localized housing
orifices on an opposite
side thereof from the
baffle apertures in said
baffle enclosure; and

a final coolant screen disposed between
said baffle enclosure and generator housing in
juxtaposed relation thereto;

whereby gases produced in said propellant
container flow therefrom through said plenum so as
to impinge and condense on an inner wall of said
baffle enclosure, said gases then being
constrained to flow circumferentially in one
direction along an interior wall of said baffle
enclosure to the apertures therein, thence
radially outwardly through said baffle apertures,
thence circumferentially in an opposite direction
through said final coolant screen to the housing
orifices in said generator housing.

The references relied on by the examiner are:

Jorgensen et al. (Jorgensen) 1, 1977	4,005,876	Feb.
Goetz 1977	4,012,211	Mar. 15,
Cunningham 1989	4,878,690	Nov. 7,

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The following rejections are applicable to the claims on appeal:³

Claims 1, 2 and 4-6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Goetz in view of Jorgensen.

Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over Goetz in view of Jorgensen and Cunningham.

Each of the above-noted rejections is based on the examiner's view that:

The Goetz patent teaches a gas generator comprising a propellant container (40) having a plurality of apertures (42) therein; a propellant (16) in the propellant container; a baffle enclosure or filter layers (44, 52, 54, 50, 56 & 46) disposed about the propellant container; and a generator housing (12) disposed about the baffle enclosure wherein a final coolant screen or filter (48) is provided adjacent the generator housing. The Goetz '211 patent fails to disclose a baffle enclosure in spaced relation to the propellant container so as to define a plenum.

The Jorgensen et al patent teaches a gas generator comprising a baffle enclosure or filter layers (11 & 13') disposed about a propellant (10) and the use of a

plenum(s) (ie., areas containing packages 21 as well as 4', See Figs. 6 & 7). Jorgensen et al disclose fitting all the components inside the gas generator

³ The supplemental answer dated November 9, 1993 (Paper No. 15) states that "all 35 U.S.C. 112, second paragraph rejections are hereby withdrawn."

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housing (19') in such a manner so as to create a long path for combustion gases to flow and thereby cool prior to discharge into the air bag. Moreover, Fig. 6 shows how the gases flow in a[n] s-shaped pattern.

It would have been obvious to one of ordinary skill in the art to incorporate the teachings of Jorgensen et al in the Goetz patent in order to create a longer path for combustion gases to cool before discharging into an air bag. In addition, it would have been obvious to one of ordinary skill in the art to incorporate the use of a plenum(s) as taught by Jorgensen et al in the Goetz patent in order to allow for the neutralization of combustion gases. The plenum(s) would thereby serve as a means for holding neutralizing agent. [Answer, pages 4 and 5.]

We will not support the examiner's position. First, we cannot agree with the examiner's findings that the filter layers 44, 52, 54, 50 and 56 of Goetz and the filter layers 11 and 13' of Jorgensen are "baffle enclosures." Terms in a claim should be interpreted in a manner consistent with the specification and construed as those skilled in the art would construe them (**see *In re Bond***, 910 F.2d 831, 833, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990), ***Specialty Composites v. Cabot Corp.***, 845 F.2d 981, 986, 6 USPQ2d 1601, 1604 (Fed. Cir. 1988) and ***In re Sneed***, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983)). Here, the

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appellants' specification makes it clear that the baffle enclosure is a tube 100 having apertures 110 which directs the flow of gas to a particular location and in a particular direction, and is something in addition to the various screens (see, e.g., pages 6 and 7). We can think of no circumstances under which the artisan, consistent with the appellants' specification, would consider the filter layers 44, 52, 54, 50 and 56 of Goetz and the filter layers 11 and 13' of Jorgensen to be "baffle enclosures" as the examiner contends. In Goetz there is nothing which can be fairly considered to be a baffle enclosure and in Jorgensen the member 12' is the baffle enclosure.

Turning to the proposed combination of references, we observe that Goetz and Jorgensen are directed to two different types of gas generators. That is, the gas generator of Goetz is designed for "cylindrical radial flow" (column 1, line 42) of gas through all the screens, including screen 48 which the examiner considers

to be a cooling screen. On the other hand, the gas generator of Jorgensen is designed for circumferential flow of gas

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through the cooling screens (see column 1, lines 56-66).
Absent the appellants' own disclosure, we are at a complete loss to understand why one of ordinary skill in this art would have been motivated to single out a plenum from the gas generator of Jorgensen (wherein the flow of gas is circumferential through the cooling screens) and incorporate it into the gas generator of Goetz (wherein the flow of gas through the cooling screens is radial).

Moreover, even if the teachings of Goetz and Jorgensen were combined in the manner proposed by the examiner, the claimed invention would not result. Recognizing that Goetz does not teach a plenum, the examiner apparently proposes to single out from Jorgensen's gas generator either the plenum 4' or the plenum or recess in which neutralizing packages 21 are contained. If plenum 4' is singled out, this plenum (which contains no screen) lies between Jorgensen's generator housing 22 and baffle enclosure 12' whereas each of the independent claims on appeal expressly require (1) the plenum to be between the baffle enclosure and the propellant container and (2) a final coolant screen to be disposed between the baffle enclosure and the generator housing. Alternatively, if one of

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the recesses in which the neutralizing packages 21 are contained is singled out as the plenum, we must point out that Jorgensen, while teaching that this plenum lies between the baffle enclosure 12' and the propellant container 5', also teaches that this plenum should be located at the **same** radial disposition as the cooling screen 13' (i.e., that the cooling screen should **also** be located between baffle enclosure 12' and the propellant container 5'). On the other hand, as we have noted above, independent claims 1 and 6 each expressly require that the cooling screen be disposed between the baffle enclosure and the generator housing. There is simply nothing in the combined teachings of Goetz and Jorgensen which would either teach or fairly suggest the particular arrangement of a plenum and a cooling screen in a gas generator as defined by independent claims 1 and 6.

We have carefully reviewed the teachings of Cunningham but find nothing therein which would overcome the above-noted deficiencies of Goetz and Jorgensen.

The examiner's rejections of claims 1-6 under 35 U.S.C. §

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103 are reversed.

REVERSED

JAMES M. MEISTER)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
NEAL E. ABRAMS)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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CHARLES E. FRANKFORT)	
Administrative Patent Judge)	

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