

Art Unit 2616

Paper No. 32

**MAILED**

Appeal No. 93-4338

PSB

HEARD:  
February 16, 1994

**FEB 28 1994**

**PAT.&T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES**

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte Robert M. Hunter

---

Application filed January 24, 1991, Serial No. 645,212.  
This application is a Reissue of Serial No. 051,325, filed  
May 19, 1987, now U.S. Patent No. 4,799,388 granted January 24,  
1989; which is a Continuation-in-Part of Serial No. 846,516,  
filed March 31, 1986, abandoned. Apparatus and Technique for  
Metering Liquid Flow.

---

Steve Rosenblatt et al. for Appellant.

---

Primary Examiner - Richard E. Chilcot, Jr.  
Examiner - Herbert Goldstein.

---

Before Parsons, Stoner and Meister, Administrative Patent Judges.  
Parsons, Administrative Patent Judge.

This appeal involves claims 42-45. All the original  
patent claims (1-23) as amended January 29, 1993 stand allowed.  
New claims 24-40 as amended June 21, 1993 now stand allowed.  
Claim 41 has been canceled. We reverse.

The appellant's invention as recited in the claims now on appeal relates to a process of metering the gravity flow of a liquid in a pipe (claims 42, 43) and to the apparatus for metering the gravity flow of a liquid in a pipe (claims 44, 45). The apparatus is a closed conduit venturi metering member installed in a pipe in a sewer drain pipe.

Claims 42 and 44 are representative of the subject matter on appeal. Claims 42 and 44, reproduced from Appendix B of the Appeal Brief (Paper No. 24), read as follows:

42. A process of metering the flow of liquid which is flowing in a pipe, wherein a closed conduit venturi metering device is installed in the pipe, which device has an open-ended bore about an axis therethrough extending end-to-end thereof, the bore having an entrance section adjacent a first end thereof, an exit section adjacent the second end thereof, and between the entrance and exit sections, a throat having a top and bottom and a smaller cross-sectional area than the entrance and exit sections, comprising the steps of:

arranging the device in the pipe to accept flow into the entrance from the pipe and otherwise to substantially block the pipe,

configuring the throat with at least a portion of the top or bottom thereof or both in a separate horizontal plane parallel to the throat axis, and with a distance between the throat top and bottom, so that the throat will fill with liquid substantially simultaneously with the entrance section, when liquid depth rises in the entrance section, and

determining flow through said pipe in less than full and in full flow.

44. Apparatus for metering flow of liquid which is flowing in a closed conduit, comprising:

Appeal No. 93-4338

a closed conduit venturi metering member having an open-ended bore about an axis therethrough extending end-to-end thereof, said bore having an entrance section adjacent a first end thereof, an exit section adjacent the second end thereof, and between the entrance and exit sections, a throat having a top and bottom and a smaller cross-sectional area than the entrance and exit sections,

said member having means for arrangement of the member in a closed conduit to accept flow into said entrance from the closed conduit and otherwise to substantially block the closed conduit,

said throat being configured with at least a portion of the top or bottom thereof or both in a separate horizontal plane parallel to the throat axis, and with a distance between the throat top and bottom, such that the throat will fill with liquid substantially simultaneously with the entrance section, when liquid depth rises in the entrance section, and

means for measuring flow through said closed conduit in less than full and in full flow conditions.

No prior art has been relied upon in the rejection of any claim on appeal.

The sole ground of rejection maintained on appeal is:

Claims 42-45 are rejected under 35 USC 251 as not being for the invention disclosed in the original specification and/or the specification as originally filed does not provide support for the invention as [sic, it] is now claimed for the reasons noted [sic, in] item (10) of the Examiner's Answer<sup>1</sup> (Supplemental Examiner's Answer (Paper No. 25), page 2).

---

<sup>1</sup>This rejection was first presented as a new rejection in the Examiner's Answer (Paper No. 22).

Appeal No. 93-4338

The examiner's position as stated in the Examiner's Answer (Paper No. 22), page 5, is:

The specification as originally filed requires the cross section of the throat dimensional relative to the upstream section of the pipe or inlet section. There is no basis in the specification for a relationship between the top and bottom as being the determining factor in causing simultaneous filling of the throat and pipe or inlet section. There is no basis in the specification for the "throat being positioned relative to said constricting inlet" as a factor in simultaneous filling. The examiner finds no basis in the specification for either of the newly claimed relationships. There is no evidence appellant intended anything other than the relationship between the throat and inlet or pipe as the critical factor in determining simultaneous filling.

The examiner also proffers in the Examiner's Answer (Paper No. 22) the further rationale in support of the rejection:

"Appellant questions whether the examiner's rejection is based on failure to provide a written description or failure to provide an enabling disclosure. The statement that there is no basis for the claimed invention as regards the reference to the distance relationship between the top and bottom of the throat and throat position relative to inlet section means the examiner finds no reference to these limitations in the original specification. In other words there is no written description and there is no disclosure of these limitations and they constitute new matter.

"Appellant has broadly suggested support somewhere in column 8. The examiner find [sic, finds] no mention of the distance between the top and bottom as establishing

simultaneous filling. In the example given appellant specifies inlet pipe diameter ( $7\frac{1}{2}$  inches), then assumes a throat shape (rectangular) and width (4 inches) at the throat top to establish the criteria which gives simultaneous filling with a  $7\frac{1}{2}$  inch inlet."

It is the appellant's arguments in response to the rejection of claims 42-45 on the basis that the limitation,

configuring the throat with at least a portion of the top or bottom thereof or both in a separate horizontal plane parallel to the throat axis, and with a distance between the throat top and bottom, so that the throat will fill with liquid substantially with the entrance section when liquid depth rises in the entrance section ... ,

lacks support in the originally-filed specification, that the equations at columns 7 and 8 and the acknowledged concept of simultaneous filling supports the objected to phrase defining the throat configuration and the consequential simultaneous filling of the throat.

We will not sustain the rejection because there is, in our view, descriptive support in the specification for the limitation concerning configuring the throat to allow or achieve substantially simultaneous filling of the throat with the entrance section of the closed conduit venturi metering device. The specification states in column 2, line 5, that

the cross-section of the throat is adapted, relative to that of the upstream section of the pipe, transverse the respective axes thereof, so that the throat fills with liquid

Appeal No. 93-4338

substantially simultaneously with the up-stream section of the pipe, when the liquid depth rises therein.

The phrase which the examiner finds particularly troublesome "---and with a distance between the throat top and bottom---" is nothing more than a truism, a statement of fact, i.e., that there is in fact a distance or some dimension between the throat top and the throat bottom. However this distance or dimension is merely a statement pertaining to basically any cross sectional area or size of the throat and it is the configuration of the throat, its cross section, determinable by the equations of columns 7 and 8 and which "are equally applicable to other throat configurations" (column 8, lines 62-63) and the presence of the separate horizontal plane top and bottom surfaces that is the parameter that accomplishes the throat filling with liquid substantially simultaneously with the entrance section and not the fact that there is "a distance between the throat top and bottom." The test for determining compliance with the written description requirement of §112 is whether the disclosure of the application as originally filed reasonably conveys to an artisan that the inventor had possession at that time of the latter claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language. See In re Kaslow, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983). It

