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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/211,066	08/24/2005	Christopher C. Benevides	WAF-333	4949
43840	7590	01/12/2012	EXAMINER	
Waters Technologies Corporation 34 MAPLE STREET - LG MILFORD, MA 01757			THERKORN, ERNEST G	
			ART UNIT	PAPER NUMBER
			1778	
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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRISTOPHER C. BENEVIDES,
ROBERT COLLAMATI, and DENNIS DELLAROVERE

Appeal 2010-009837
Application 11/211,066
Technology Center 1700

Before BRADLEY R. GARRIS, LINDA M. GAUDETTE, and
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1, 8-10, 15-20, 45, and 47. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

Appellants claim a device for transporting liquids comprising a first cylinder 10 and a second cylinder 24, wherein the first ends of the first and second cylinders terminate at the same point, and a third cylinder 36 projecting outward from the second end of the first cylinder for receiving a transport tube (claim 1; Fig. 1A).

Representative claim 1, the sole independent claim on appeal, reads as follows:

1. A device for transporting liquids comprising:

a first cylinder having a wall, having an interior surface and an exterior surface, and a first end and second end, said interior surface defining a chamber for receiving a liquid sample;

a second cylinder having a wall, having an interior surface and an exterior surface, and a first end and a second end, said interior surface of said second end of said second cylinder secured to said exterior surface of said first end of said first cylinder, said wall of said second cylinder having a thickness, [and]said second cylinder occupying a position on said first cylinder such that a portion of said first cylinder is uncovered by said second cylinder, said second cylinder being positioned on said first cylinder such that the respective said first ends of said first cylinder and said second cylinder terminate at the same point, and said exterior surface of said wall of said second cylinder being for receiving a fitting assembly;

a third cylinder having a wall having an interior surface and an exterior surface, and a first end and a second end, said interior surface of said first end of said third cylinder secured to said exterior surface of said first cylinder about said second end of said first cylinder, said third cylinder wall having a thickness, and said third cylinder occupying a position on said first cylinder such that a portion of said first cylinder is uncovered by said second cylinder, said third cylinder projecting outward from said second end of said first cylinder to expose the interior surface wall of said second end of said third cylinder for receiving a transport tube; and,

a fourth cylinder having a wall having an interior surface and an exterior surface, and a first end and a second end, said interior surface of said fourth cylinder secured to said exterior surface of said second cylinder and said exterior surface of said third cylinder to stabilize and support said first, second and third cylinders by maintaining a relationship among said cylinders and providing thickness to support connections to fluid transport means.

The references listed below are relied upon by the Examiner as evidence of obviousness:

McDonald et al.	US 4,211,658	July 8, 1980
Bente, III et al.	US 4,293,415	Oct. 6, 1981
Fuchs et al.	US 5,348,658	Sept. 20, 1994
Garguilo et al.	US 6,068,767	May 30, 2000
Nyudo et al.	US 2005/0077218 A1	Apr. 14, 2005
Mukaiyama et al.	JP 56150352	Nov. 20, 1981
Hoffmann	DE 19607865 A1	Feb. 6, 1997 ¹
Hoffmann	JP 9119924	May 5, 1997 ¹

¹ Like Appellants (Br. 12), we consider the Hoffman references applied by the Examiner to contain corresponding disclosures. For this reason and for ease of exposition, we will refer to these references collectively as the Hoffman references.

The Examiner rejects claims 1, 8-10, 15-18, and 47 under 35 U.S.C. § 112, 2nd paragraph, for failing to particularly point out and distinctly claim the subject matter which Appellants regard as their invention.

Under 35 U.S.C. § 103(a), the Examiner rejects claims 1, 8-10, 15-18, and 47 as unpatentable over the Hoffman references in view of Fuchs alone or further in view of either Nyudo or Mukaiyama, claims 9, 10, 19, and 20 as unpatentable over the references applied against claim 1 and further in view of Garguilo and McDonald, and claim 45 as unpatentable over the references applied against claim 1 and further in view of Bente.

Appellants state that dependent claims 8-10, 15-20, 45, and 47 stand or fall with independent claim 1 (Br. 11). Therefore, our disposition of this appeal will focus on claim 1 only.

The § 112, 2nd paragraph, Rejection

The Examiner's rationale for this rejection follows:

Having the second cylinder and the third cylinder for receiving elements in the same claim [i.e., claim 1] renders the claim indefinite. Since one is a male end and the other is a female end, it would appear that one should be a receiving end and one should be for being received by. If the interior surface wall of the second end of the third cylinder is for receiving a transport tube as a female end, then it would make more sense for the exterior surface of the wall of the second cylinder "to be received by" a fitting as opposed to "receiving" a fitting, thus making it a male as opposed to another female end. As the claims are written, both ends would appear to be female ends. However, this does not appear to be what appellants intend. As such, the claims are considered to be indefinite.

(Ans. para. bridging 3-4).

We agree with Appellants that the claim 1 phrase "for receiving" does not render the rejected claims indefinite (Br. 11). For the reasons detailed by Appellants, the requirements of § 112, 2nd paragraph, are not violated by use of this phrase in referring to the second cylinder male end (*id.*).

We reverse the § 112, 2nd paragraph, rejection.

The § 103 Rejections

We affirm the § 103 rejections for the reasons given by the Examiner in the Answer. The comments below are added for emphasis.

Appellants disagree with the Examiner's finding that the first ends of the first and second cylinders of the Hoffman references (i.e., the left ends of cylinders 1 and 3 in Fig. 1a of the Hoffman references) terminate at the same point as required by claim 1 (Br. para. bridging 15-16). This disagreement is based on Appellants' unembellished assertion that "[t]here is no comparison between the adapter member [i.e., cylinder 3] of Hoffman patents and the second cylinder of the claimed invention" (*id.*). On this record, Appellants have failed to identify any error in the Examiner's finding because they have failed to identify any structural distinction between the second cylinder of claim 1 and cylinder 3 of the Hoffman references.

Appellants do not contest with any reasonable specificity the Examiner's conclusion that it would have been obvious to combine the applied references as proposed in the rejections of claim 1. Instead, Appellants describe the purposes served by the cylinder features of claim 1 and then state without explanation that "[t]his configuration and the functions [or features] resulted therefrom in no way can be achieved by [the

Appeal 2010-009837
Application 11/211,066

reference combinations proposed by the Examiner]" (*id.* at 17; *see also id.* at 19). However, this statement does not identify any structural limitation of claim 1 which remains unsatisfied by the Examiner's proposed combination of references.

For the reasons stated above and in the Answer, the expositions presented by Appellants in their Appeal Brief do not reveal any error in the findings of fact or conclusions of law made by the Examiner in rejecting claim 1.

Conclusion

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED

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11/211,066	08/24/2005	Christopher C. Benevides	WAF-333	4949
43840	7590	07/16/2010	EXAMINER	
Waters Technologies Corporation 34 MAPLE STREET - LG MILFORD, MA 01757			THERKORN, ERNEST G	
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WATERS TECHNOLOGIES CORPORATION
34 MAPLE STREET - LG
MILFORD, MA 01757

Appeal No: 2010-009837
Application: 11/211,066
Appellant: Christopher C. Benevides et al.

Board of Patent Appeals and Interferences Docketing Notice

Application 11/211,066 was received from the Technology Center at the Board on July 12, 2010 and has been assigned Appeal No: 2010-009837.

In all future communications regarding this appeal, please include both the application number and the appeal number.

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By order of the Board of Patent Appeals and Interferences.



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43840	7590	04/06/2010	EXAMINER	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 11/211,066
Filing Date: August 24, 2005
Appellants: BENEVIDES ET AL.

Siqun Huang
For Appellants

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 4, 2010 appealing from the Office action mailed March 23, 2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellants' statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

U.S Patent No. 5,348,658	FUCH et al	09-1994
U.S. Patent Publication No.	NYUDO et al	04-2005

Art Unit: 1797

2005/0077218

U.S Patent No. 6,068,767	GARGUILO et al	05-2000
U.S. Patent No. 4,211,658	McDONALD et al	07-1980
U.S. Patent No. 4,293,415	BENTE et al	10-1981
DE Patent No. 19607865	HOFFMANN et al	02-1997
Japan Patent No. 9-119924	HOFFMANN et al	06-1997
Japan Patent No. 56-	MUKAIYAMA et al	11-1981

150352

Machine Language Translation of Hoffman (Japan Patent No. 9-119924)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 8-10, 15-18, and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Having the second cylinder and the third cylinder for receiving elements in the same claim renders the claim indefinite. Since one is a male end and the other is a female end, it would appear that one should be a receiving end and one should be for being received by. If the interior surface wall of the second end of the third cylinder is for receiving a transport tube as a female end, then it would make more sense for the exterior surface of the wall of the second cylinder "to be received by" a fitting as opposed to "receiving" a fitting, thus making it a male as opposed to another female end. As the claims are written, both

Art Unit: 1797

ends would appear to be female ends. However, this does not appear to be what appellants intend. As such, the claims are considered to be indefinite.

Claims 1, 8-10, 15-18, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658). The machine language translation is being used as a translation of Hoffman (Japan Patent No. 9-119924) and Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) is considered to be a single reference. At best, the claims differ from either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) in reciting an outwardly projecting third cylinder. Fuchs (U.S. Patent No. 5,348,658) Figure 3's tube 12 is a first cylinder. Fuchs (U.S. Patent No. 5,348,658) Figure 3's sleeve 34 is a third cylinder. The space occupied by sample concentration tube 36 is a receiving space. Fuchs (U.S. Patent No. 5,348,658) (Figure 3 and column 5, lines 32-44) discloses that use of a space allows for a two piece construction, allowing replacement of only the sample concentration tube when it ceases working. It would have been obvious to provide a space under an outwardly projecting third cylinder because Fuchs (U.S. Patent No. 5,348,658) (Figure 3 and column 5, lines 32-44) discloses that use of a space allows for a two piece construction, allowing replacement of only the sample concentration tube when it ceases working.

Art Unit: 1797

Claims 1, 8-10, 15-18, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) as applied to claims 1, 8-10, 15-18, and 47 above, and further in view of either Nyudo (U.S. Patent Publication No. 2005/0077218) or Mukaiyama (Japan Patent No. 56-150352). At best, the claims differ from either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) in reciting the second cylinder is for receiving a fitting assembly. Nyudo (U.S. Patent Publication No. 2005/0077218) (paragraph 34) discloses that having a cylindrical member surrounding an inner tube with a convex member allows it to be inserted into a concave member. Mukaiyama (Japan Patent No. 56-150352) pictorially shows a projecting portion for the obvious purpose of connecting to end fittings. It would have been obvious to have either a convex member or a projecting portion in either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) either because Nyudo (U.S. Patent Publication No. 2005/0077218) (paragraph 34) discloses that having a cylindrical member surrounding an inner tube with a convex member allows it to be inserted into a concave member or because Mukaiyama (Japan Patent No. 56-150352) pictorially shows a projecting portion for the obvious purpose of connecting to end fittings.

Art Unit: 1797

Claims 9, 10, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) or either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) and either Nyudo (U.S. Patent Publication No. 2005/0077218) or Mukaiyama (Japan Patent No. 56-150352) as applied to claims 1, 8-10, 15-18, and 47 above, and further in view of Garguilo (U.S. Patent No. 6,068,767) and McDonald (U.S. Patent No. 4,211,658). At best, the claims differ from either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) or either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) and either Nyudo (U.S. Patent Publication No. 2005/0077218) or Mukaiyama (Japan Patent No. 56-150352) in reciting use of heat shrinkable material. Garguilo (U.S. Patent No. 6,068,767) (column 6, lines 25-30) discloses that heat shrinkable Teflon joins capillaries and maintains their relative position. McDonald (U.S. Patent No. 4,211,658) (Abstract) discloses that heat-shrinkable material is suitable as column tube material. It would have been obvious to use heat shrink material in either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent

Art Unit: 1797

No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) or either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) and either Nyudo (U.S. Patent Publication No. 2005/0077218) or Mukaiyama (Japan Patent No. 56-150352) because Garguilo (U.S. Patent No. 6,068,767) (column 6, lines 25-30) discloses that heat shrinkable Teflon joins capillaries and maintains their relative position and McDonald (U.S. Patent No. 4,211,658) (Abstract) discloses that heat-shrinkable material is suitable as column tube material.

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) or either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) and either Nyudo (U.S. Patent Publication No. 2005/0077218) or Mukaiyama (Japan Patent No. 56-150352) as applied to claims 1, 8-10, 15-18, and 47 above, and further in view of Bente (U.S. Patent No. 4,293,415). At best, the claim differs from either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) or either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-

Art Unit: 1797

119924) further in view of Fuchs (U.S. Patent No. 5,348,658) and either Nyudo (U.S. Patent Publication No. 2005/0077218) or Mukaiyama (Japan Patent No. 56-150352) in reciting use of protective coating. Bente (U.S. Patent No. 4,293,415) (Abstract) disclose that use of an exterior coating protects against abrasion and moisture. It would have been obvious to use protective coating in either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) or either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) and either Nyudo (U.S. Patent Publication No. 2005/0077218) or Mukaiyama (Japan Patent No. 56-150352) because Bente (U.S. Patent No. 4,293,415) (Abstract) disclose that use of an exterior coating protects against abrasion and moisture.

(10) Response to Argument

Appellants urge that the rejection under 35 U.S.C. 112, second paragraph is improper. Having the second cylinder and the third cylinder for receiving elements in the same claim renders the claim indefinite. Since one is a male end and the other is a female end, it would appear that one should be a receiving end and one should be for being received by. If the interior surface wall of the second end of the third cylinder is for receiving a transport tube as a female end, then it would make more sense for the exterior surface of the wall of the second cylinder “to be received by” a fitting as opposed to “receiving” a fitting, thus making it a male as opposed to another female

Art Unit: 1797

end. As the claims are written, both ends would appear to be female ends. However, this does not appear to be what appellants intend. As such, the claims are considered to be indefinite.

Appellants urge patentability based upon size. However, only dependent claims 15 and 47 have a size limitation. Dependent claim 47's 50 to 250 mm reads on paragraph 20 of the machine language translation of Hoffman (Japan Patent No. 9-119924)'s length of 50 to 300 mm. Since the industry's trend is for ever smaller columns, dependent claim 15's .2mm (200 microns) would appear to be an obvious optimization of paragraphs 20 and 29 of the machine language translation of Hoffman (Japan Patent No. 9-119924)'s disclosure an inside diameter of 1.00 and less than 2 mm.

Appellants urge patentability based upon chromatographic properties. However, no claim is directed to a chromatographic feature. Indeed, chromatographic claims 29-43 have been restricted from the case by the restriction requirement of July 28, 2008 and appellants' response of August 13, 2008. A connection to an HPLC pump is not a limitation that is in the claims. Use of a fused silica capillary column and its attendant fragile or unfragile nature are not limitations that are in the claims. The amount of void volume would also not be a limitation in the claims. Configuring the device as a liquid chromatography column is the subject matter of non-elected claim 29 and has been restricted from the case.

Appellants urge that Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) do not have cylinders that end at the same place. However, an inspection of

Art Unit: 1797

Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924)'s Figures 1A shows cylinders 1 and 3 ending at the same place. Allegations directed to the intended purpose of the cylinders do not negate the fact that they end at the same place. In any event, Nyudo (U.S. Patent Publication No. 2005/0077218) (paragraph 34) discloses that having a cylindrical member surrounding an inner tube with a convex member allows it to be inserted into a concave member. Mukaiyama (Japan Patent No. 56-150352) pictorially shows a projecting portion for the obvious purpose of connecting to end fittings. As such, it would have been obvious to have either a convex member or a projecting portion in either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) either because Nyudo (U.S. Patent Publication No. 2005/0077218) (paragraph 34) discloses that having a cylindrical member surrounding an inner tube with a convex member allows it to be inserted into a concave member or because Mukaiyama (Japan Patent No. 56-150352) pictorially shows a projecting portion for the obvious purpose of connecting to end fittings.

Appellants urge patentability based upon tight abutment of the recited cylinders. Having tight abutment would not appear to be a limitation in any claim. The claims read on loosely abutting columns.

Appellants urge patentability based upon reciting an outwardly projecting third cylinder. Fuchs (U.S. Patent No. 5,348,658) Figure 3's tube 12 is a first cylinder. Fuchs (U.S. Patent No. 5,348,658) Figure 3's sleeve 34 is a third cylinder. The space occupied by sample concentration tube 36 is a receiving space. Fuchs (U.S. Patent No.

Art Unit: 1797

5,348,658) (Figure 3 and column 5, lines 32-44) discloses that use of a space allows for a two piece construction, allowing replacement of only the sample concentration tube when it ceases working. It would have been obvious to provide a space under an outwardly projecting third cylinder because Fuchs (U.S. Patent No. 5,348,658) (Figure 3 and column 5, lines 32-44) discloses that use of a space allows for a two piece construction, allowing replacement of only the sample concentration tube when it ceases working.

Appellants urge on page 18 of the brief that the examiner contends that there is a difference based upon the second cylinder. However, the examiner stated that “At best, the claims differ” “in reciting the second cylinder is for receiving a fitting assembly.” This is a back-up rejection that was necessitated by the indefiniteness of the claims. At the time of the final rejection, the examiner was uncertain what appellants perceived to be the metes and bounds of their claims. An inspection of Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924)’s Figures 1A shows cylinders 1 and 3 ending at the same place. This is all that the claims require. Although the feature is shown in the primary references, Nyudo (U.S. Patent Publication No. 2005/0077218) (paragraph 34) discloses that having a cylindrical member surrounding an inner tube with a convex member allows it to be inserted into a concave member. Mukaiyama (Japan Patent No. 56-150352) pictorially shows a projecting portion for the obvious purpose of connecting to end fittings. As such, it would have been obvious to have either a convex member or a projecting portion in either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-

Art Unit: 1797

119924) either because Nyudo (U.S. Patent Publication No. 2005/0077218) (paragraph 34) discloses that having a cylindrical member surrounding an inner tube with a convex member allows it to be inserted into a concave member or because Mukaiyama (Japan Patent No. 56-150352) pictorially shows a projecting portion for the obvious purpose of connecting to end fittings.

Appellants urge patentability based upon use of heat shrinkable material. However, Garguilo (U.S. Patent No. 6,068,767) (column 6, lines 25-30) discloses that heat shrinkable Teflon joins capillaries and maintains their relative position. McDonald (U.S. Patent No. 4,211,658) (Abstract) discloses that heat-shrinkable material is suitable as column tube material. As such, it would have been obvious to use heat shrink material in either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) or either Hoffman (DE 19,607,865) or Hoffman (Japan Patent No. 9-119924) in view of the machine language translation of Hoffman (Japan Patent No. 9-119924) further in view of Fuchs (U.S. Patent No. 5,348,658) and either Nyudo (U.S. Patent Publication No. 2005/0077218) or Mukaiyama (Japan Patent No. 56-150352) because Garguilo (U.S. Patent No. 6,068,767) (column 6, lines 25-30) discloses that heat shrinkable Teflon joins capillaries and maintains their relative position and McDonald (U.S. Patent No. 4,211,658) (Abstract) discloses that heat-shrinkable material is suitable as column tube material.

(11) Related Proceeding(s) Appendix

Art Unit: 1797

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Ernest G. Therkorn/
Ernest G. Therkorn
Primary Examiner
Art Unit 1797

EGT
March 24, 2010

Conferees:

/David R. Sample/
Supervisory Patent Examiner, Art Unit 1794

/Duane Smith/
Supervisory Patent Examiner, Art Unit 1797