

# **EXHIBIT 2001**



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	W. Haynes Sloan JR.	

45309  
Williams Mullen  
999 Waterside Drive, Suite 1700  
Norfolk, VA 23510-3303

**CONFIRMATION NO. 1359  
POA ACCEPTANCE LETTER**



Date Mailed: 06/20/2014

**NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 06/05/2014.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/dtvernon/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	W. Haynes Sloan JR.	9952-6IP

**CONFIRMATION NO. 1359**

**POWER OF ATTORNEY NOTICE**

20792  
MYERS BIGEL SIBLEY & SAJOVEC  
PO BOX 37428  
RALEIGH, NC 27627



Date Mailed: 06/20/2014

**NOTICE REGARDING CHANGE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 06/05/2014.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/dtvernon/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

## POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date
12/620.327	11/17/2009

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

- I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above: 45309
- OR
- I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

- The address associated with the above-mentioned Customer Number
- OR
- The address associated with Customer Number:
- OR

Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

InvisaFlow, LLC

- Inventor or Joint Inventor (title not required below)
- Legal Representative of a Deceased or Legally Incapacitated inventor (title not required below)
- Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)
- Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

**SIGNATURE of Applicant for Patent**

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature	Date (Optional)
Name	Jeffrey E. Smith
Title	VP of Operations

**NOTE:** Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to be (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FILES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	19221442
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE
<b>First Named Inventor/Applicant Name:</b>	W. Haynes Sloan
<b>Customer Number:</b>	20792
<b>Filer:</b>	Richard Thomas Matthews/DeAnna Robertson
<b>Filer Authorized By:</b>	Richard Thomas Matthews
<b>Attorney Docket Number:</b>	9952-6IP
<b>Receipt Date:</b>	05-JUN-2014
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	14:16:00
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	POA-12620327.pdf	108835 <small>ed975d18d32517a6d1cbd58b7aa0950d19f6acc</small>	no	1

### Warnings:

### Information:

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	W. Haynes Sloan JR.	9952-6IP

20792  
MYERS BIGEL SIBLEY & SAJOVEC  
PO BOX 37428  
RALEIGH, NC 27627

**CONFIRMATION NO. 1359**  
**MISCELLANEOUS NOTICE**



Date Mailed: 05/02/2014

A communication which cannot be delivered in electronic form has been mailed to the applicant.


**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	W. Haynes Sloan JR.	9952-6IP

**CONFIRMATION NO. 1359**

20792  
 MYERS BIGEL SIBLEY & SAJOVEC  
 PO BOX 37428  
 RALEIGH, NC 27627



\*OC000000068189799\*

Cc: WILLIAMS MULLEN  
 999 WATERSIDE DOWN  
 SUITE 1700  
 NORFOLK, VA 23510

 Date Mailed: 05/02/2014
**DENIAL OF REQUEST FOR POWER OF ATTORNEY**

The request for Power of Attorney filed 04/30/2014 is acknowledged. However, the request cannot be granted at this time for the reason stated below.

- The Power of Attorney you provided did not comply with the new Power of Attorney rules that became effective on June 25, 2004. See 37 CFR 1.32.
- The revocation is not signed by the applicant, the assignee of the entire interest, or one particular principal attorney having the authority to revoke.
- The Power of Attorney is from an assignee and the Certificate required by 37 CFR 3.73(c) has not been received.
- The person signing for the assignee has omitted their empowerment to sign on behalf of the assignee.
- The inventor(s) is without authority to appoint attorneys since the assignee has intervened as provided by 37 CFR 3.71.
- The signature(s) of \_\_\_\_\_, a co-inventor in this application, has been omitted. The Power of Attorney will be entered upon receipt of confirmation signed by said co-inventor(s).
- The person(s) appointed in the Power of Attorney is not registered to practice before the U.S. Patent and Trademark Office.
- Only one Customer Number can be designated for the Power of Attorney in an application. The Customer Number that was captured is the first Customer Number provided on the Power of Attorney document.
- A request under 37 CFR 1.48 to add an inventor was granted in this application, however, no power of attorney consistent with the power of attorney granted by the originally named inventive entity has been received. Thus, the addition of the inventor has resulted in the loss of power of attorney in the application. See 37 CFR 1.32(e).





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- The power of attorney has not been accepted because the party who is giving power of attorney has not been identified. Power of attorney may only be signed by the applicant for patent (37 CFR 1.42) or the patent owner. A patent owner who was not the applicant must appoint any power of attorney in compliance with 37 CFR 3.71 and 3.73. See 37 CFR 1.32(b)(4).
- The power of attorney from the inventors has not been accepted because it is a copy from a prior national application for which benefit is claimed and the continuing application names an inventor who was not named as an inventor in the prior application.
- The power of attorney from the inventors has not been accepted because the power of attorney must be signed by the applicant for patent. See 37 CFR 1.32(b)(4).
- Any request to correct or update the name of the applicant must include an application data sheet (ADS) in compliance with 37 CFR 1.76 specifying the correct or updated name of the applicant in the applicant information section. Any request to change the applicant after an original applicant has been specified under 37 CFR 1.46(b) must include a new ADS in compliance with 37 CFR 1.76 specifying the applicant in the applicant information section and comply with 37 CFR 3.71 and 3.73. See 37 CFR 1.46(c).

Any inquiries regarding this notice should be directed to the Application Assistance Unit at 571-272-4200.

Application Assistance Unit  
571-272-4200

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

## POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date
12/620,327	11/17/2009

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

- I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above:
- OR
- I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

- The address associated with the above-mentioned Customer Number
- OR
- The address associated with Customer Number:
- OR

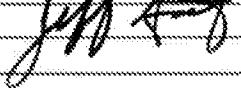
Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

- Inventor or Joint Inventor (title not required below)
- Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)
- Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)
- Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

### SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature		Date (Optional)
Name	Jeffrey E. Smith	
Title	Inventor	

**NOTE:** Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.151, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 5 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1460.

If you need assistance in completing the form, call 1-800-PTO-8199 and select option 2.

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	18898654
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE
<b>First Named Inventor/Applicant Name:</b>	W. Haynes Sloan
<b>Customer Number:</b>	20792
<b>Filer:</b>	Richard Thomas Matthews/DeAnna Robertson
<b>Filer Authorized By:</b>	Richard Thomas Matthews
<b>Attorney Docket Number:</b>	9952-6IP
<b>Receipt Date:</b>	30-APR-2014
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	09:50:04
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	POA-12620327.pdf	271258 <small>3aab1e589ac1caf88842eb3f3529659880f9b96d</small>	no	1

### Warnings:

### Information:

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

AO 120 (Rev. 08/10)

<b>TO:</b> <b>Mail Stop 8</b> <b>Director of the U.S. Patent and Trademark Office</b> <b>P.O. Box 1450</b> <b>Alexandria, VA 22313-1450</b>	<b>REPORT ON THE</b> <b>FILING OR DETERMINATION OF AN</b> <b>ACTION REGARDING A PATENT OR</b> <b>TRADEMARK</b>
--	---

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Northern District of Georgia on the following

Trademarks or  Patents. (  the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 1:12-cv-2971-SCJ	DATE FILED 8/28/2012	U.S. DISTRICT COURT Northern District of Georgia
PLAINTIFF Invisaflow, Inc.		DEFENDANT Euramax International, Inc. and Euramax Holdings, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 US 8,251,302 B2	8/28/2012	InvisaFlow, Inc.
2		
3		
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
1			
2			
3			
4			
5			

In the above—entitled case, the following decision has been rendered or judgement issued:

<b>DECISION/JUDGEMENT</b> Clerk's Entry of Dismissal pursuant to Fed.R.Civ.P.41(a)(1)(i).
--

CLERK JAMES N. HATTEN	(BY) DEPUTY CLERK s/Amanda Querrard	DATE 10/18/12
--------------------------	--	------------------

0 1. Upon initiation of action, mail this copy to Director. Copy 3—Upon termination of action, mail this copy to Director.

AO 120 (Rev. 08/10)

TO: <b>Mail Stop 8</b> <b>Director of the U.S. Patent and Trademark Office</b> P.O. Box 1450 Alexandria, VA 22313-1450	<b>REPORT ON THE                  FILING OR DETERMINATION OF AN                  ACTION REGARDING A PATENT OR                  TRADEMARK</b>
---	--

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Northern District of Georgia on the following

Trademarks or  Patents. (  the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 1:12-cv-2971-SCJ	DATE FILED 8/28/2012	U.S. DISTRICT COURT Northern District of Georgia
PLAINTIFF Invisaflo, Inc.		DEFENDANT Euramax International, Inc. and Euramax Holdings, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 US 8,251,302 B2	8/28/2012	InvisaFlow, Inc.
2		
3		
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK HOLDER OF PATENT OR TRADEMARK
1	
2	
3	
4	
5	

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
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CLERK	(BY) DEPUTY CLERK	DATE
-------	-------------------	------

1. Upon initiation of action, mail this copy to Director. Copy 3—Upon termination of action, mail this copy to Director.



APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/620,327	08/28/2012	8251302	9952-6IP	1359

20792 7590 08/08/2012  
MYERS BIGEL SIBLEY & SAJOVEC  
PO BOX 37428  
RALEIGH, NC 27627

### ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

#### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)** (application filed on or after May 29, 2000)

The Patent Term Adjustment is 451 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

W. Haynes Sloan JR., Gallatin, TN;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit [SelectUSA.gov](http://SelectUSA.gov).



UNITED STATES PATENT AND TRADEMARK OFFICE

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 www.uspto.gov

BIB DATA SHEET

CONFIRMATION NO. 1359

<b>SERIAL NUMBER</b> 12/620,327	<b>FILING or 371(c) DATE</b> 11/17/2009	<b>CLASS</b> 239	<b>GROUP ART UNIT</b> 3752	<b>ATTORNEY DOCKET NO.</b> 9952-6IP	
<b>APPLICANTS</b> W. Haynes Sloan JR., Gallatin, TN; <b>** CONTINUING DATA *****</b> This application is a CIP of 12/262,621 10/31/2008 PAT 7,748,650 which is a CON of 11/561,313 11/17/2006 PAT 7,458,532 <b>** FOREIGN APPLICATIONS *****</b> <b>** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY **</b> 11/30/2009					
Foreign Priority claimed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 35 USC 119(a-d) conditions met <input type="checkbox"/> Yes <input type="checkbox"/> No Verified and Acknowledged <u>/STEVEN J GANEY/</u> Examiner's Signature	<input type="checkbox"/> Met after Allowance Initials _____	<b>STATE OR COUNTRY</b> TN	<b>SHEETS DRAWINGS</b> 10	<b>TOTAL CLAIMS</b> 20	<b>INDEPENDENT CLAIMS</b> 3
<b>ADDRESS</b> MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627 UNITED STATES					
<b>TITLE</b> LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE					
<b>FILING FEE RECEIVED</b> 822	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		





UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 4 columns: APPLICATION NUMBER (12/620,327), FILING OR 371(C) DATE (11/17/2009), FIRST NAMED APPLICANT (Haynes Sloan JR.), ATTY. DOCKET NO./TITLE (9952-6IP)

CONFIRMATION NO. 1359

PUBLICATION NOTICE

20792
MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627



Title:LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE

Publication No.US-2012-0175437-A1
Publication Date:07/12/2012

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

**PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** Mail **Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450**  
**or Fax** **(571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

20792          7590          06/26/2012  
**MYERS BIGEL SIBLEY & SAJOVEC**  
**PO BOX 37428**  
**RALEIGH, NC 27627**

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)
_____ (Signature)
_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/620,327	11/17/2009	Haynes Sloan JR.	9952-6IP	1359

TITLE OF INVENTION: **LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE**

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$870	\$300	\$0	\$1170	09/26/2012

EXAMINER	ART UNIT	CLASS-SUBCLASS
GANEY, STEVEN J	3752	239-593000

**1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).**  
 Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

**2. For printing on the patent front page, list**  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 Myers Bigel Sibley & Sajovec  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
 3 \_\_\_\_\_

**3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT** (print or type)  
 PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.  
 (A) NAME OF ASSIGNEE InvisaFlow LLC      (B) RESIDENCE: (CITY and STATE OR COUNTRY) Alpharetta, Georgia

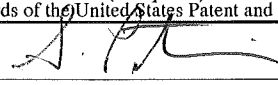
Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

**4a. The following fee(s) are submitted:**  
 Issue Fee  
 Publication Fee (No small entity discount permitted)  
 Advance Order - # of Copies \_\_\_\_\_

**4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)**  
 A check is enclosed.  
 Payment by credit card. Form PTO-2038 is attached.  
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 50-0220 (enclose an extra copy of this form).

**5. Change in Entity Status** (from status indicated above)  
 a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.       b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature   
 Typed or printed name Stephen J. Petroski

Date July 5, 2012  
 Registration No. 64,947

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	12620327
<b>Filing Date:</b>	17-Nov-2009
<b>Title of Invention:</b>	LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Filer:</b>	Stephen Petroski/Joyce Adair
<b>Attorney Docket Number:</b>	9952-6IP

Filed as Small Entity

### Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
Utility Appl issue fee	2501	1	870	870
Publ. Fee- early, voluntary, or normal	1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Extension-of-Time:</b>				
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>1170</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	13185746
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	20792
<b>Filer:</b>	Stephen Petroski/Joyce Adair
<b>Filer Authorized By:</b>	Stephen Petroski
<b>Attorney Docket Number:</b>	9952-6IP
<b>Receipt Date:</b>	05-JUL-2012
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	18:11:59
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1170
RAM confirmation Number	6893
Deposit Account	500220
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

<b>File Listing:</b>					
<b>Document Number</b>	<b>Document Description</b>	<b>File Name</b>	<b>File Size(Bytes)/ Message Digest</b>	<b>Multi Part /.zip</b>	<b>Pages (if appl.)</b>
1	Issue Fee Payment (PTO-85B)	9952-6IP.pdf	159310 f89c1becfd02a4656d5312d5082f3709a84ae37	no	1
<b>Warnings:</b>					
<b>Information:</b>					
2	Fee Worksheet (SB06)	fee-info.pdf	31919 22d2077f74aa843ea2ddde35c86825cbe13bdac2	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			191229		
<p><b>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  <b>If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</b></p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  <b>If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</b></p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  <b>If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</b></p>					

<b>Applicant-Initiated Interview Summary</b>	<b>Application No.</b> 12/620,327	<b>Applicant(s)</b> SLOAN, HAYNES	
	<b>Examiner</b> STEVEN J. GANEY	<b>Art Unit</b> 3752	

All participants (applicant, applicant's representative, PTO personnel):

- (1) STEVEN J. GANEY. (3) STEPHEN J. PETROSKI(ATTORNEY).  
(2) RICHARD T. MATTHEWS(ATTORNET). (4) \_\_\_\_\_.

Date of Interview: 30 May 2012.

Type:  Telephonic  Video Conference  
 Personal [copy given to:  applicant  applicant's representative]

Exhibit shown or demonstration conducted:  Yes  No.  
If Yes, brief description: \_\_\_\_\_.

Issues Discussed 101 112 102 103 Others  
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: Claims of record.

Identification of prior art discussed: Art of record.

**Substance of Interview**

(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Discussed proposed amendments to the claims and the differences between the claimed subject matter and the cited prior art. Attorneys proposed claim language further defining the structure of the attachment focusing on the relationships between the inlet end, the outlet end, and the outlet opening. Examiner indicated that proposed amendments to the claims would overcome prior art of record, however, further search and consideration would be warranted.

**Applicant recordation instructions:** The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Attachment

/STEVEN J. GANEY/  
Primary Examiner, Art Unit 3752

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.





UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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NOTICE OF ALLOWANCE AND FEE(S) DUE

20792 7590 06/26/2012
MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

EXAMINER
GANEY, STEVEN J
ART UNIT PAPER NUMBER

3752
DATE MAILED: 06/26/2012

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

12/620,327 11/17/2009 Haynes Sloan JR. 9952-61P 1359
TITLE OF INVENTION: LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.
If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:
A. Pay TOTAL FEE(S) DUE shown above, or
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

20792 7590 06/26/2012 MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Form with fields for Depositor's name, Signature, and Date.

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Values: 12/620,327, 11/17/2009, Haynes Sloan JR., 9952-6IP, 1359

TITLE OF INVENTION: LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE. Values: nonprovisional, YES, \$870, \$300, \$0, \$1170, 09/26/2012

Table with 3 columns: EXAMINER, ART UNIT, CLASS-SUBCLASS. Values: GANEY, STEVEN J, 3752, 239-593000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted: Issue Fee, Publication Fee, Advance Order. 4b. Payment of Fee(s): A check is enclosed, Payment by credit card, The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number.

5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature, Typed or printed name, Date, Registration No.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
Values: 12/620,327, 11/17/2009, Haynes Sloan JR., 9952-6IP, 1359

20792 7590 06/26/2012
MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

EXAMINER

GANEY, STEVEN J

ART UNIT PAPER NUMBER

3752

DATE MAILED: 06/26/2012

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 451 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 451 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Privacy Act Statement

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

**Notice of Allowability**

Application No.

12/620,327

Examiner

STEVEN J. GANEY

Applicant(s)

SLOAN, HAYNES

Art Unit

3752

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1.  This communication is responsive to amendment filed June 14, 2012.
- 2.  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 3.  The allowed claim(s) is/are 21-24,26,27,29-32,34,36,37 and 39-47.
- 4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    - 1.  Certified copies of the priority documents have been received.
    - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_ .
    - 3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

- 5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  - 6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_.
    - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
- 7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- 1.  Notice of References Cited (PTO-892)
- 2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3.  Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_
- 4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5.  Notice of Informal Patent Application
- 6.  Interview Summary (PTO-413), Paper No./Mail Date hereto .
- 7.  Examiner's Amendment/Comment
- 8.  Examiner's Statement of Reasons for Allowance
- 9.  Other \_\_\_\_.

/STEVEN J. GANEY/  
Primary Examiner  
Art Unit: 3752

<b>Issue Classification</b> 	<b>Application/Control No.</b> 12620327	<b>Applicant(s)/Patent Under Reexamination</b> SLOAN, HAYNES
	<b>Examiner</b> STEVEN J GANEY	<b>Art Unit</b> 3752

ORIGINAL						INTERNATIONAL CLASSIFICATION														
CLASS		SUBCLASS				CLAIMED					NON-CLAIMED									
239		593				B	0	5	B	1 / 04 (2006.01.01)										
<b>CROSS REFERENCE(S)</b>																				
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																			
239	499	525	592	598	600															
239	601																			
285	239	331																		
138	177																			

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant																<input type="checkbox"/> CPA																<input checked="" type="checkbox"/> T.D.																<input type="checkbox"/> R.1.47															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original																																				
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	15	9	31		22		47																																																								
	16	16	32																																																												

NONE		<b>Total Claims Allowed:</b>	
		22	
(Assistant Examiner)	(Date)	O.G. Print Claim(s)	O.G. Print Figure
/STEVEN J GANEY/ Primary Examiner.Art Unit 3752	06/18/2012	1	1, 2
(Primary Examiner)	(Date)		




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

BIB DATA SHEET

CONFIRMATION NO. 1359

<b>SERIAL NUMBER</b> 12/620,327	<b>FILING or 371(c) DATE</b> 11/17/2009 <b>RULE</b>	<b>CLASS</b> 239	<b>GROUP ART UNIT</b> 3752	<b>ATTORNEY DOCKET NO.</b> 9952-6IP		
<b>APPLICANTS</b> Haynes Sloan JR., Gallatin, TN; <b>** CONTINUING DATA *****</b> This application is a CIP of 12/262,621 10/31/2008 PAT 7,748,650 which is a CON of 11/561,313 11/17/2006 PAT 7,458,532 <b>** FOREIGN APPLICATIONS *****</b> <b>** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY **</b> 11/30/2009						
Foreign Priority claimed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 35 USC 119(a-d) conditions met <input type="checkbox"/> Yes <input type="checkbox"/> No Verified and Acknowledged <u>/STEVEN J GANEY/</u> Examiner's Signature		<input type="checkbox"/> Met after Allowance Initials	<b>STATE OR COUNTRY</b> TN	<b>SHEETS DRAWINGS</b> 10	<b>TOTAL CLAIMS</b> 20	<b>INDEPENDENT CLAIMS</b> 3
<b>ADDRESS</b> MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627 UNITED STATES						
<b>TITLE</b> Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe						
<b>FILING FEE RECEIVED</b> 522	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit			

<b>Index of Claims</b>  	<b>Application/Control No.</b>  12620327	<b>Applicant(s)/Patent Under Reexamination</b>  SLOAN, HAYNES
	<b>Examiner</b>  STEVEN J GANEY	<b>Art Unit</b>  3752

✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>


N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	04/09/2012	06/18/2012						
	1	-	-						
	2	-	-						
	3	-	-						
	4	-	-						
	5	-	-						
	6	-	-						
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	20	-	-						
1	21	✓	=						
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3	23	✓	=						
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5	26	✓	=						
6	27	✓	=						
	28	✓	-						
7	29	✓	=						
8	30	✓	=						
9	31	✓	=						
16	32	✓	=						
	33	✓	-						
17	34	✓	=						
	35	✓	-						
18	36	✓	=						



<b><i>Index of Claims</i></b>  	<b>Application/Control No.</b>  12620327	<b>Applicant(s)/Patent Under Reexamination</b>  SLOAN, HAYNES
	<b>Examiner</b>  STEVEN J GANEY	<b>Art Unit</b>  3752

✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	04/09/2012	06/18/2012						
19	37	✓	=						
	38	✓	-						
20	39	✓	=						
21	40	✓	=						
10	41		=						
11	42		=						
12	43		=						
13	44		=						
14	45		=						
15	46		=						
22	47		=						


## EAST Search History

## EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	(attachment and gravity and flow and (surface with drainage with system) and elevated and water and source and drainage and location and (circular with inlet with end) and (intake with opening) and (inlet with height) and (inlet with width) and (center with point) and (rectangular with outlet with end) and (outlet with opening) and (outlet with width) and (outlet with height) and (greater with than) and (transitional with section) and between and increase and width and height and positioned and below and (gravity with influence with water with flowing) and portion and (effect with erosion) and polymeric).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2012/06/18 11:23

6/ 18/ 2012 11:24:03 AM

C:\Users\sganey\Documents\EAST\Workspaces\12620327.wsp

<b>Search Notes</b>  	<b>Application/Control No.</b>  12620327	<b>Applicant(s)/Patent Under Reexamination</b>  SLOAN, HAYNES
	<b>Examiner</b>  STEVEN J GANEY	<b>Art Unit</b>  3752

<b>SEARCHED</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>
239	499,525,531,589,592,593,594,597,598,600,601	04/09/12	SJG
285	305,328,331,397,398,399,239,256,259	4/09/12	SJG
52	16	04/09/12	SJG
138	177	04/09/02	SJG
	ABOVE UPDATED.	06/18/12	SJG

<b>SEARCH NOTES</b>		
<b>Search Notes</b>	<b>Date</b>	<b>Examiner</b>
TEXT AND INVENTORSHIP SEARCHED.	04/09/12	SJG
ABOVE UPDATED.	06/18/12	SJG

<b>INTERFERENCE SEARCH</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>
	INTERFERENCE SEARCH HISTORY PRINTOUT.	06/18/12	SJG

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<b>Doc Code: DIST.E.FILE</b> <b>Document Description: Electronic Terminal Disclaimer - Filed</b>	PTO/SB/25 PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce
---	--

Electronic Petition Request	<b>TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING "REFERENCE" APPLICATION AND TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT</b>
Application Number	12620327
Filing Date	17-Nov-2009
First Named Inventor	Haynes Sloan
Attorney Docket Number	9952-6IP
Title of Invention	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe

- Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action
- This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.

Owner	Percent Interest
Invisiflow LLC	100 %

The owner(s) of percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of any patent granted on pending reference Application Number(s)

12620327 filed on 11/17/2009

as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the reference application are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term of any patent granted on said reference application, "as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application," in the event that any such patent granted on the pending reference application: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant.

The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s)

7748650

as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:

- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

- Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.
- I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.

- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).
- Applicant(s) status remains as SMALL ENTITY.
- Applicant(s) status remains as other than SMALL ENTITY.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES

I certify, in accordance with 37 CFR 1.4(d)(4) that I am:

- An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application  
Registration Number 64947
- A sole inventor
- A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors
- A joint inventor; all of whom are signing this request
- The assignee of record of the entire interest that has properly made itself of record pursuant to 37 CFR 3.71

Signature

/Stephen J. Petroski/

Name	Stephen J. Petroski
------	---------------------

\*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).  
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	12620327
<b>Filing Date:</b>	17-Nov-2009
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Filer:</b>	Stephen Petroski/Joyce Adair
<b>Attorney Docket Number:</b>	9952-6IP

Filed as Small Entity

### Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
Statutory or terminal disclaimer	2814	1	80	80

**Pages:**

**Claims:**

**Miscellaneous-Filing:**

**Petition:**

**Patent-Appeals-and-Interference:**

**Post-Allowance-and-Post-Issuance:**

**Extension-of-Time:**

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>80</b>



Doc Code: DISQ.E.FILE

Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 12620327

Filing Date: 17-Nov-2009

Applicant/Patent under Reexamination: Sloan et al.

Electronic Terminal Disclaimer filed on June 14, 2012

APPROVED

**This patent is subject to a terminal disclaimer**

DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	13015883
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	20792
<b>Filer:</b>	Stephen Petroski/Joyce Adair
<b>Filer Authorized By:</b>	Stephen Petroski
<b>Attorney Docket Number:</b>	9952-6IP
<b>Receipt Date:</b>	14-JUN-2012
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	15:17:12
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$80
RAM confirmation Number	1766
Deposit Account	500220
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

<b>File Listing:</b>					
<b>Document Number</b>	<b>Document Description</b>	<b>File Name</b>	<b>File Size(Bytes)/ Message Digest</b>	<b>Multi Part /.zip</b>	<b>Pages (if appl.)</b>
1	Electronic Terminal Disclaimer-Filed	eTerminal-Disclaimer.pdf	36557 <small>3a6adbf06d8228759c56c433c9211c9caf0ad427</small>	no	3
<b>Warnings:</b>					
<b>Information:</b>					
2	Fee Worksheet (SB06)	fee-info.pdf	30074 <small>5a5bbe435d8c25a81c3a09f9d266ab39f668bd79</small>	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			66631		
<p><b>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  <b>If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</b></p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  <b>If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</b></p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  <b>If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</b></p>					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application: Haynes Sloan Jr.

Confirmation No.: 1359

Application No.: 12/620,327

Group Art Unit: 3752

Filed: November 17, 2009

Examiner: Steven J. Ganey

For: **LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH  
CONNECTOR FOR CORRUGATED PIPE**

Date: June 14, 2012

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

AMENDMENT

Sir:

In response to the Office Action dated April 12, 2012 (the "Office Action"), please amend the above-identified application as follows.

If any extension of time for the accompanying response or submission is required, Applicant requests that this be considered a petition therefor. The Director is hereby authorized to charge any additional fee, which may be required, or credit any refund, to our Deposit Account No. 50-0220.

**Amendments to the Drawings** begin on page 2 of this paper.

**Amendments to the Claims** begin on page 3 of this paper.

**Remarks** begin on page 8 of this paper.

An **Appendix** including amended drawing figures is attached following page 16 of this paper.

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**Amendments to the Drawings:**

Figure 5 has been amended in the attached Replacement Sheet, as described in more detail in the remarks below.

Attachment: Replacement Sheet

**Amendments to the Claims:**

This listing of claims replaces all prior listings of claims in the application.

1-20. (Canceled)

21. (Currently amended) An attachment for ~~reducing erosion and directing use in a gravity~~ flow, surface drainage system configured to direct water from [[a]] an elevated water source to a drainage location, the attachment comprising:

[[an]] a circular inlet end including an intake opening, the intake opening comprising an inlet width and an inlet height, the inlet end including a center point;

[[an]] a rectangular outlet end including an outlet opening, the outlet end comprising an outlet width and an outlet height, wherein the outlet width is greater than the outlet height; and

a transitional section between the inlet end and the outlet end, wherein the transitional section comprises an outwardly diverging flaring shape increasing increases in width and decreases in height towards the outlet end and wherein the outlet width is greater than the inlet width;

wherein the outlet opening is positioned below the inlet end center point such that gravity influences water flowing through at least a portion of the attachment; and

wherein the outlet width is greater than the inlet width to disperse water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening ~~attachment is effective to reduce erosion; and~~

wherein the attachment is polymeric.

22. (Previously presented) The attachment of claim 21, further comprising an elongated rectangular section between the transitional section and the outlet end.

23. (Previously presented) The attachment of claim 21, further comprising a collection area adapted to collect water and widen a stream of water flowing through the attachment.

24. (Currently amended) The attachment of claim 21, further comprising a support rib mounted thereto.

25. (Canceled)

26. (Previously presented) The attachment of claim 21, wherein the intake opening is adapted to fit the water source.

27. (Previously presented) The attachment of claim 26, wherein the water source comprises any one of a pipe and down spout.

28. (Canceled)

29. (Currently amended) The attachment of claim 21, wherein the ~~outwardly flaring shape~~ transitional section transitions into a rectangular shape towards the outlet end.

30. (Previously presented) The attachment of claim 21, wherein the outlet width is at least 1.5 times larger than an inlet width.

31. (Currently amended) The attachment of claim 21, wherein ~~[[an]]~~ the inlet height is at least twice as large as the outlet height.

32. (Currently amended) A gravity flow drainage attachment for directing water from ~~[[a]]~~ an elevated water source to a drainage location, the attachment comprising:

~~[[an]]~~ a circular inlet end including an intake opening comprising an inlet width and an inlet height, the inlet end including a center point;

~~[[an]]~~ a rectangular outlet end ~~adapted to reduce erosion~~, the outlet end comprising an outlet width and outlet height, the outlet end comprising an outlet opening, wherein the outlet width is greater than the outlet height; ~~and~~

a transitional section between the inlet end and the outlet end, wherein the transitional section increases in width and reduces in height and transitions into a rectangular shape towards the outlet end and wherein the outlet width is greater than the inlet width; and

an elongated rectangular section between the transitional section and the outlet end; wherein the outlet opening is positioned below the inlet end center point such that gravity influences water flowing through at least a portion of the attachment; and

wherein the outlet width is greater than the inlet width to disperse water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening attachment is effective to reduce erosion; and

wherein the attachment is polymeric.

33. (Canceled)

34. (Currently amended) The attachment of claim 32, further comprising a support rib mounted thereto.

35. (Canceled)

36. (Previously presented) The attachment of claim 32, wherein the intake opening is adapted to fit the water source.

37. (Previously presented) The attachment of claim 36, wherein the water source comprises any one of a pipe and down spout.

38. (Canceled)

39. (Previously presented) The attachment of claim 32, wherein the outlet width is at least 1.5 times larger than an inlet width.



40. (Currently amended) The attachment of claim 32, wherein the inlet height is at least twice as large as the outlet height.

41. (New) The attachment of claim 21, wherein the inlet end includes an attachment member to removably secure the water source to the inlet end.

42. (New) The attachment of claim 41, wherein the attachment member is positioned along an interior surface of the inlet end.

43. (New) The attachment of claim 41, wherein the attachment member comprises a slot configured to engage the water source.

44. (New) The attachment of claim 21, wherein the inlet end is configured to engage 4 inch diameter piping from the water source.

45. (New) The attachment of claim 21, wherein the inlet end has an inlet height that is substantially greater than the outlet height, and wherein differential between the inlet height and outlet height and the inlet width and outlet width along a length of the attachment gently disperses water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening.

46. (New) The attachment of claim 21, wherein, in position, the inlet end is engaged with the water source and the outlet end is configured to be positioned under a surface adjacent the drainage location, thereby facilitating maintenance around and over the outlet end.

47. (New) An attachment for use in a gravity flow, surface drainage system configured to direct water from an elevated water source to a drainage location, the attachment comprising:  
a circular inlet end including an intake opening, the inlet end having an inlet height and an inlet width, the inlet end including an attachment member to removably secure the water source

to the inlet end, the inlet end including a center point;

a rectangular outlet end including an outlet opening, the outlet end comprising an outlet width and an outlet height, wherein the outlet width is greater than the outlet height;

a transitional section between the inlet end and the outlet end, wherein the transitional section increases in width and decreases in height and transitions into a rectangular shape towards the outlet end; and

an elongated rectangular section between the transitional section and the outlet end;  
wherein the inlet height is at least twice as large as the outlet height;

wherein the outlet opening is positioned below the inlet end center point such that gravity influences water flowing through at least a portion of the attachment;

wherein the outlet width is greater than the inlet width to disperse water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening; and

wherein the attachment is polymeric.

## **REMARKS**

Applicant sincerely appreciates the thorough examination of the application as set forth in the Office Action. Applicant respectfully submits that the application is in condition for allowance in view of the amendments above and the remarks that follow.

### **Interview Summary**

Applicant acknowledges, with sincere appreciation, Examiner Ganey's time and attention extended to Applicant's representatives, Stephen J. Petroski and Richard T. Matthews, in the Interview at the USPTO on May 30, 2012. During the Interview, the parties discussed claim amendments substantially as set forth above and discussed the differences between the claimed subject matter and the cited prior art. Examiner Ganey indicated that the amendments to the claims as set forth above would overcome the art of record.

### **Amendments to the Drawings**

Figure 5 has been amended to indicate the inlet end center point 54. This feature is clearly described at paragraph [0032] of the application; therefore this amendment does not introduce new matter.

### **Status of the Claims**

Claims 21-40 were previously pending, with Claims 21 and 32 being the independent claims.

Claims 21 and 32 stand rejected on the ground of non-statutory obviousness-type double patenting over Claims 1 and 4 of U.S. Patent No. 7,748,650. Office Action, p. 3.

Claims 21, 23-28, 32 and 34-38 stand rejected under Section 102(b) as anticipated by U.S. Patent No. 1,033,195 to Robinson ("Robinson"). Office Action, p. 3.

Claims 21, 22, 29, 32 and 33 stand rejected under Section 102(b) as anticipated U.S. Patent No. 2,397,655 to Francis ("Francis"). Office Action, p. 3.

Claims 30, 31, 39 and 40 stand rejected under Section 103(a) as being unpatentable over Francis. Office Action, p. 4.

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By way of this Amendment, Claims 21, 24, 29, 31, 32, 34 and 40 have been amended and Claims 25, 28, 33, 35 and 38 have been canceled to advance the application to allowance. New Claims 41-47 have been added for a more complete claim set.

### **The Obviousness-Type Double Patenting Rejections**

A terminal disclaimer over U.S. Patent No. 7,748,650 was electronically filed and approved on June 14, 2012. Accordingly, Applicant respectfully submits that the double patenting rejections of Claims 21 and 32 have been overcome.

### **The Prior Art Rejections**

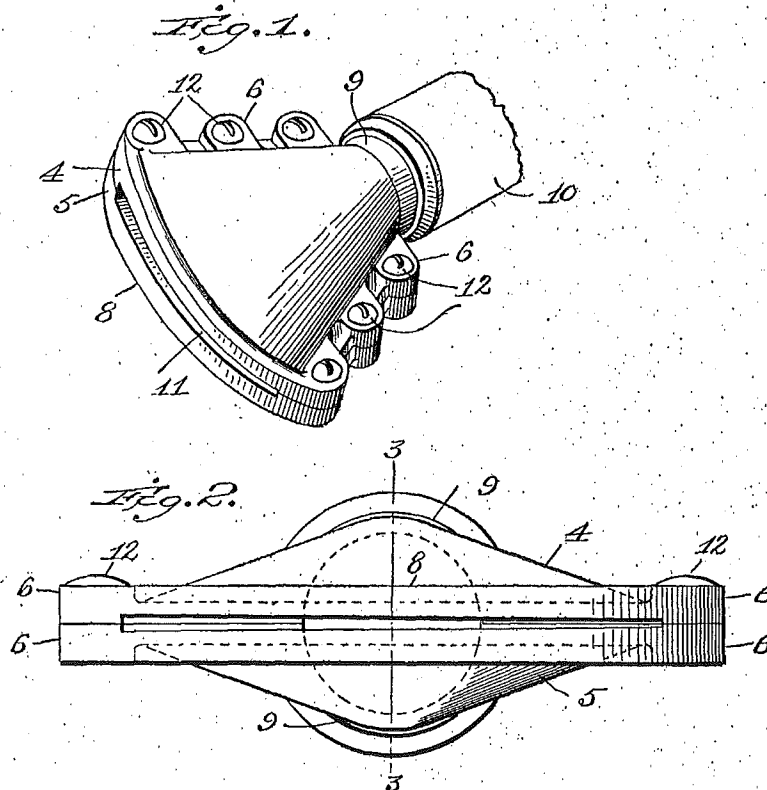
Amended independent Claim 21 recites:

21. An attachment for use in a gravity flow, surface drainage system configured to direct water from an elevated water source to a drainage location, the attachment comprising:  
a circular inlet end including an intake opening, the intake opening comprising an inlet width and an inlet height, the inlet end including a center point;  
a rectangular outlet end including an outlet opening, the outlet end comprising an outlet width and an outlet height, wherein the outlet width is greater than the outlet height; and  
a transitional section between the inlet end and the outlet end, wherein the transitional section increases in width and decreases in height towards the outlet end;  
wherein the outlet opening is positioned below the inlet end center point such that gravity influences water flowing through at least a portion of the attachment;  
wherein the outlet width is greater than the inlet width to disperse water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening; and  
wherein the attachment is polymeric.

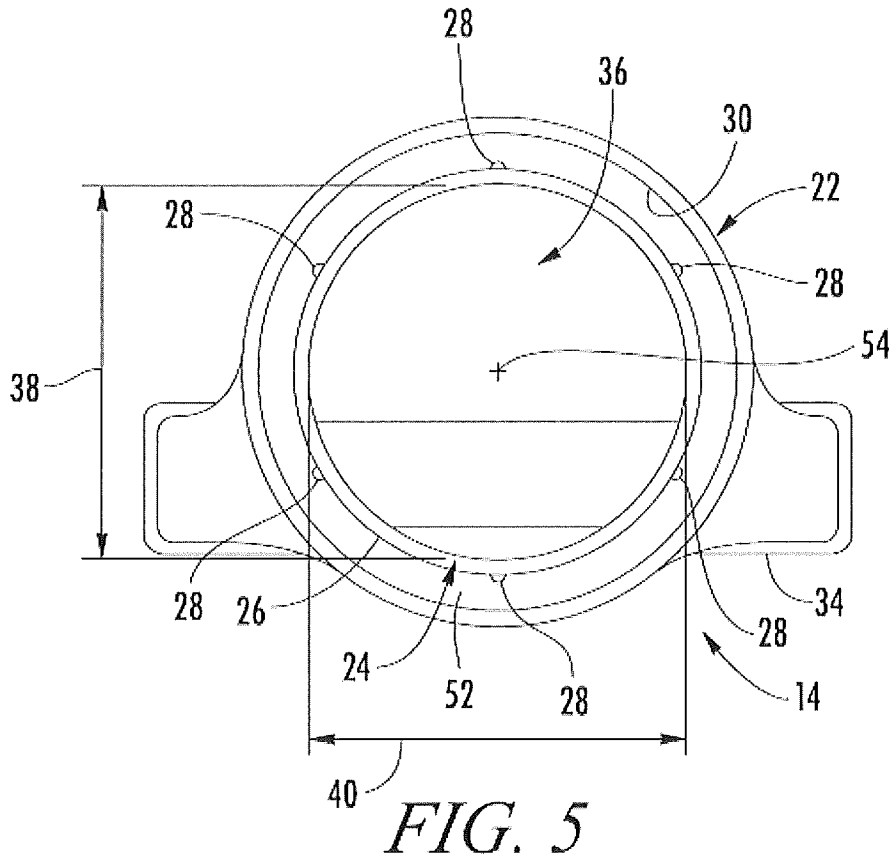
Claim 21, as examined, stands rejected under Section 102(b) as anticipated by each of Robinson and Francis. Robinson proposes a flushing nozzle for washing city pavements (see Figures 1 and 2 below). The nozzle has an inlet and an outlet that share the same center line.

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A discharge pipe is secured to the inlet and the outlet discharges a flat broad stream with force suitable for washing city pavements.



In sharp contrast, amended Claim 21 is directed to an attachment for use in a gravity flow, surface drainage system configured to direct water from an elevated water source to a drainage location. Claim 21 has been amended to recite that the attachment outlet opening is positioned below the attachment inlet end center point such that gravity influences water flowing through at least a portion of the attachment. This configuration is exemplified in Figure 5 of the present application, wherein the inlet end center point 54 is clearly positioned above the outlet opening. This feature is absent from the Robinson nozzle, as noted above.

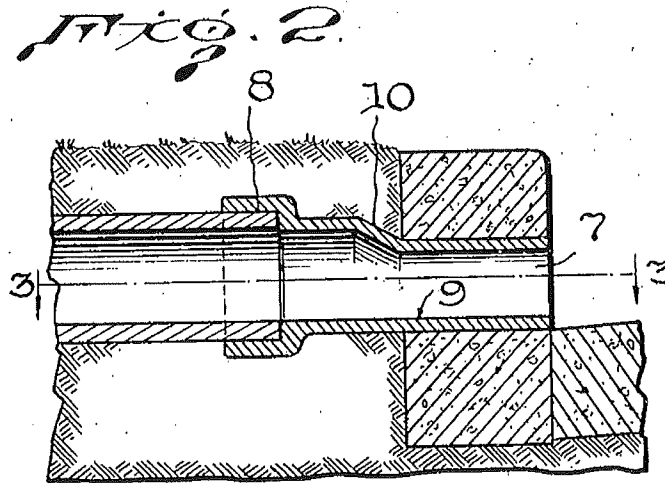


The attachment of Claim 21 is adapted to reduce the effects of erosion near a drainage location. Along these lines, amended Claim 21 recites that the outlet width is greater than the inlet width to disperse water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening. This is very different than the Robinson nozzle, which is configured to eject water from the outlet with sufficient force to clean city pavements.

Claim 21 has also been amended to recite that the attachment is polymeric. In contrast, the Robinson nozzle appears to be metallic, as the interior walls are "highly polished, which renders the delivery of the water more effective." Robinson, lines 94-96.

For at least the foregoing reasons, Applicant respectfully submits that Robinson does not anticipate independent Claim 21 and respectfully requests that the Section 102(b) rejection of Claim 21 based on Robinson be withdrawn.

Francis proposes a fitting for the outlet of water from a drain pipe to a street gutter. The fitting fits under a curb, and is designed and shaped to maintain the structural integrity of the curb. A cross-section of the fitting is shown in Figure 2 below.



Again, amended Claim 21 is directed to an attachment for use in a gravity flow, surface drainage system configured to direct water from an elevated water source to a drainage location. To more clearly define the structure of the attachment, Claim 21 has been amended to recite that the outlet opening is positioned below the inlet end center point such that gravity influences water flowing through at least a portion of the attachment.

The outlet opening of the Francis fitting is not positioned below a center point of the inlet end. Unlike the claimed invention, the Francis fitting is not configured for use with a relatively raised water source. Instead, the Francis fitting is configured for use with a horizontal drain pipe.

Furthermore, amended Claim 21 recites that the attachment is polymeric. The Francis fitting is designed to maintain the structure integrity of the curb; accordingly, Francis states

that "[c]lay, metal or any other suitable material may be used in making the device." Francis, col. 1, lines 33-34. While substantially rigid materials such as clay and metal would accomplish the goal of maintaining the structural integrity of the curb, Applicant respectfully submits that a polymeric material would not.

For at least the foregoing reasons, Applicant respectfully submits that Francis does not anticipate independent Claim 21 and respectfully requests that the Section 102(b) rejection of Claim 21 based on Francis be withdrawn.

Moreover, Applicant respectfully submits that amended Claim 21 is nonobvious over the cited art. Neither Robinson nor Francis discloses or suggests that "the outlet opening is positioned below the inlet end center point such that gravity influences water flowing through at least a portion of the attachment," as recited in Claim 21. Francis teaches away from this configuration, as the fitting is configured to receive a horizontal drain pipe, and raising the inlet of the Francis fitting may well have the effect of compromising the integrity of the curb and/or the surrounding area. Robinson also teaches away from this configuration, as the aligned nature of the inlet and outlet serves to reduce flow resistance through the nozzle, with which Robinson is concerned as evidenced by the emphasis on polishing the interior of the nozzle. Also, neither Robinson nor Francis discloses or suggests a polymeric attachment, as recited in Claim 21. Both references appear to teach away from employing a polymeric material, as described above.

Accordingly, Applicant respectfully submits that independent Claim 21 is patentable over the cited art. Claims 22-24, 26, 27 and 29-31 are patentable at least per their dependence from Claim 21.

Independent Claim 32 has been amended and now recites:

32. A gravity flow drainage attachment for directing water from an elevated water source to a drainage location, the attachment comprising:

a circular inlet end including an intake opening comprising an inlet width and an inlet height, the inlet end including a center point;

a rectangular outlet end, the outlet end comprising an outlet width and outlet height, the outlet end comprising an outlet



opening, wherein the outlet width is greater than the outlet height;  
a transitional section between the inlet end and the outlet end, wherein the transitional section increases in width and reduces in height and transitions into a rectangular shape towards the outlet end; and  
an elongated rectangular section between the transitional section and the outlet end;  
wherein the outlet opening is positioned below the inlet end center point such that gravity influences water flowing through at least a portion of the attachment;  
wherein the outlet width is greater than the inlet width to disperse water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening; and  
wherein the attachment is polymeric.

Claim 32, as examined, stands rejected under Section 102(b) as anticipated by each of Robinson and Francis. Amended Claim 32 contains corresponding recitations to those found in amended Claim 21, and Claim 32 further includes the above-underlined recitations. Therefore, for the same reasons set forth above, Applicant respectfully submits that Claim 32 is novel and inventive over the cited art. Claims 34, 36, 37, 39 and 40 are patentable at least per their dependence from Claim 32.

New Claims 41-46 depend from Claim 21 and are patentable at least due to their dependence from a patentable base claim.

New Claim 41 recites that the inlet end includes an attachment member to removably secure the water source to the inlet end. Support for this subject matter may be found at paragraphs [0029] and [0030] as well as Figures 5 and 8, for example.

New Claim 42 depends from Claim 41 and recites that the attachment member is positioned along an interior surface of the inlet end. Support for this subject matter may be found at paragraphs [0029] and [0030] as well as Figures 5 and 8, for example.

New Claim 43 depends from Claim 41 and recites that the attachment member comprises a slot configured to engage the water source. Support for this subject matter may be found at paragraphs [0029] and [0030] as well as Figures 5 and 8, for example.

New Claim 44 recites that the inlet end is configured to engage 4 inch diameter piping

from the water source. Support for this subject matter may be found at paragraph [0041], for example.

New Claim 45 recites that the inlet end has an inlet height that is substantially greater than the outlet height, wherein differential between the inlet height and outlet height and the inlet width and outlet width along a length of the attachment gently disperses water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening. Support for this subject matter may be found at paragraphs [0033] and [0040], for example, as well as the figures.

New Claim 46 recites that, in position, the inlet end is engaged with the water source and the outlet end is configured to be positioned under a surface adjacent the drainage location, thereby facilitating maintenance around and over the outlet end. Support for this subject matter may be found at paragraphs [0010] and [0011], for example, as well as the figures.

New independent Claim 47 recites:

47. An attachment for use in a gravity flow, surface drainage system configured to direct water from an elevated water source to a drainage location, the attachment comprising:  
a circular inlet end including an intake opening, the inlet end having an inlet height and an inlet width, the inlet end including an attachment member to removably secure the water source to the inlet end, the inlet end including a center point;  
a rectangular outlet end including an outlet opening, the outlet end comprising an outlet width and an outlet height, wherein the outlet width is greater than the outlet height;  
a transitional section between the inlet end and the outlet end, wherein the transitional section increases in width and decreases in height and transitions into a rectangular shape towards the outlet end; and  
an elongated rectangular section between the transitional section and the outlet end;  
wherein the inlet height is at least twice as large as the outlet height;  
wherein the outlet opening is positioned below the inlet end center point such that gravity influences water flowing through at least a portion of the attachment;

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wherein the outlet width is greater than the inlet width to disperse water flowing through the attachment and out of the outlet opening, thereby reducing the effects of erosion at the drainage location adjacent the outlet opening; and wherein the attachment is polymeric.

Claim 47 contains corresponding recitations to those found in amended Claims 21 and 32, and further includes the above-underlined recitations. Therefore, for the same reasons set forth above, Applicant respectfully submits that Claim 47 is novel and inventive over the cited art.

**CONCLUSION**

In view of the above, Applicant submits that the present application is in condition for allowance and the same is earnestly solicited. The Examiner is encouraged to telephone the undersigned attorney at 919-854-1400 to address any outstanding issues.

Respectfully submitted,



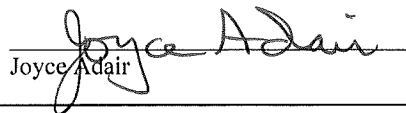
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Attachment

**CERTIFICATION OF ELECTRONIC TRANSMISSION**

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on June 14, 2012.



Joyce Adair

# REPLACEMENT SHEET

3/4

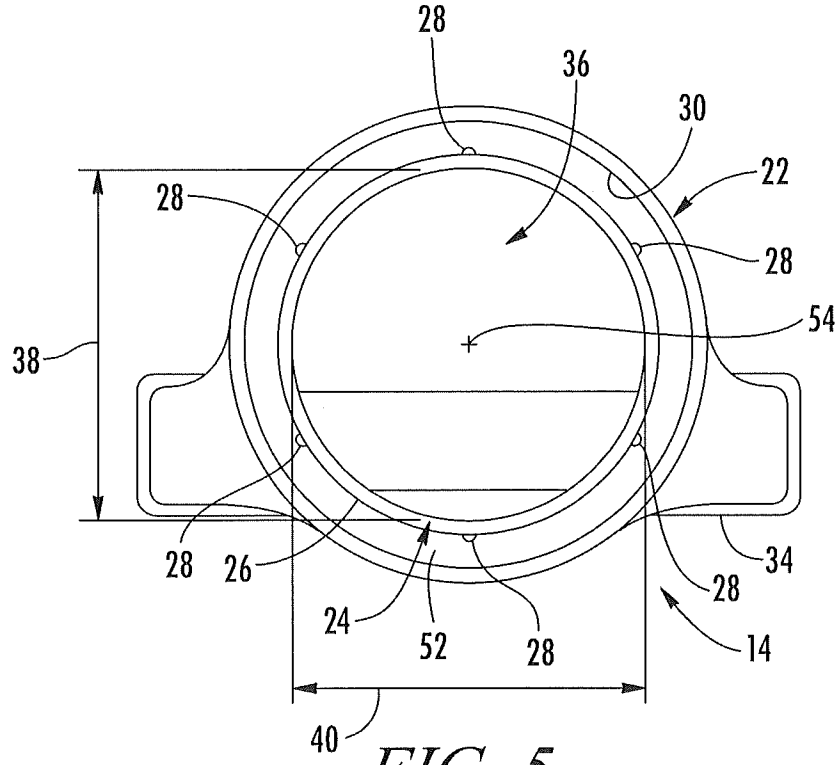


FIG. 5

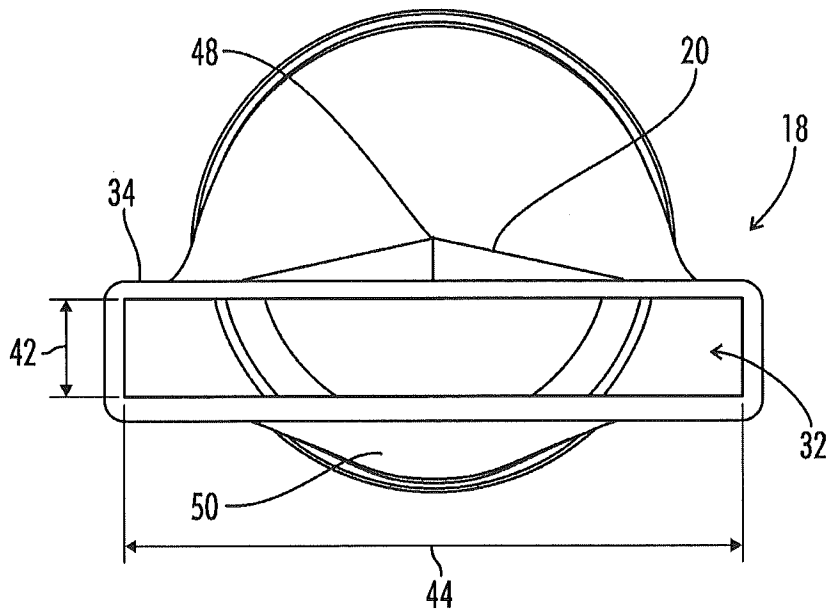


FIG. 6

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	12620327
<b>Filing Date:</b>	17-Nov-2009
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Filer:</b>	Stephen Petroski/Joyce Adair
<b>Attorney Docket Number:</b>	9952-6IP

Filed as Small Entity

### Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
Claims in excess of 20	2202	2	30	60

**Miscellaneous-Filing:**

**Petition:**

**Patent-Appeals-and-Interference:**

**Post-Allowance-and-Post-Issuance:**

**Extension-of-Time:**

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>60</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	13019268
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	20792
<b>Filer:</b>	Stephen Petroski/Joyce Adair
<b>Filer Authorized By:</b>	Stephen Petroski
<b>Attorney Docket Number:</b>	9952-6IP
<b>Receipt Date:</b>	14-JUN-2012
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	17:36:34
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$60
RAM confirmation Number	4949
Deposit Account	500220
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

<b>File Listing:</b>					
<b>Document Number</b>	<b>Document Description</b>	<b>File Name</b>	<b>File Size(Bytes)/ Message Digest</b>	<b>Multi Part /.zip</b>	<b>Pages (if appl.)</b>
1		995-6IP.pdf	1307524 <small>bed0757deea201b725365c8f06b177bbdb81161e</small>	yes	17
<b>Multipart Description/PDF files in .zip description</b>					
<b>Document Description</b>			<b>Start</b>	<b>End</b>	
Amendment/Req. Reconsideration-After Non-Final Reject			1	2	
Claims			3	7	
Applicant Arguments/Remarks Made in an Amendment			8	16	
Drawings-only black and white line drawings			17	17	
<b>Warnings:</b>					
<b>Information:</b>					
2	Fee Worksheet (SB06)	fee-info.pdf	29921 <small>63c6615989cb523c08ba0658515583009d3d3639</small>	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			1337445		
<p><b>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  <b>If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</b></p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  <b>If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</b></p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  <b>If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</b></p>					



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875	Application or Docket Number <b>12/620,327</b>	Filing Date <b>11/17/2009</b>	<input type="checkbox"/> To be Mailed
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APPLICATION AS FILED – PART I			OTHER THAN SMALL ENTITY			
	(Column 1)	(Column 2)	SMALL ENTITY <input checked="" type="checkbox"/>	OR		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>	N/A	N/A	N/A		N/A	
<input type="checkbox"/> SEARCH FEE <small>(37 CFR 1.16(k), (j), or (m))</small>	N/A	N/A	N/A		N/A	
<input type="checkbox"/> EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>	N/A	N/A	N/A		N/A	
TOTAL CLAIMS <small>(37 CFR 1.16(j))</small>	minus 20 =	*	X \$ =	OR	X \$ =	
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>	minus 3 =	*	X \$ =		X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).					
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>						
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL		TOTAL	

APPLICATION AS AMENDED – PART II					OTHER THAN SMALL ENTITY			
	(Column 1)	(Column 2)	(Column 3)		SMALL ENTITY	OR		
AMENDMENT	<b>06/14/2012</b>	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)
	Total <small>(37 CFR 1.16(i))</small>	* 22	Minus ** 22	= 0	X \$30 =	0	OR	X \$ =
	Independent <small>(37 CFR 1.16(h))</small>	* 3	Minus *** 3	= 0	X \$125 =	0	OR	X \$ =
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>						OR	
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>						OR	
					TOTAL ADD'L FEE	<b>0</b>	OR	TOTAL ADD'L FEE

	(Column 1)	(Column 2)	(Column 3)					
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)
	Total <small>(37 CFR 1.16(i))</small>	*	Minus **	=	X \$ =		OR	X \$ =
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus ***	=	X \$ =		OR	X \$ =
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>						OR	
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>						OR	
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  
 \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".  
 \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".  
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:  
/KIM P. DOZIER/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/620,327	11/17/2009	Haynes Sloan JR.	9952-6IP	1359
20792	7590	04/12/2012	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			GANEY, STEVEN J	
PO BOX 37428			ART UNIT	PAPER NUMBER
RALEIGH, NC 27627			3752	
			MAIL DATE	DELIVERY MODE
			04/12/2012	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 12/620,327	<b>Applicant(s)</b> SLOAN, HAYNES	
	<b>Examiner</b> STEVEN J. GANEY	<b>Art Unit</b> 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 17 November 2009.
- 2a)  This action is **FINAL**.
- 2b)  This action is non-final.
- 3)  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5)  Claim(s) 21-40 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 6)  Claim(s) \_\_\_\_\_ is/are allowed.
- 7)  Claim(s) 21-40 is/are rejected.
- 8)  Claim(s) \_\_\_\_\_ is/are objected to.
- 9)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10)  The specification is objected to by the Examiner.
- 11)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \*    c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 02/18/10.
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5)  Notice of Informal Patent Application
- 6)  Other: \_\_\_\_\_.

**DETAILED ACTION*****Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Art Unit: 3752

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 21 and 32 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 4 of U.S. Patent No. 7,748,650. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim an attachment comprising an inlet end, outlet end, and transitional section. The claims of the instant invention are broader in scope than claims 1 and 4 of U.S. Patent No. 7,748,650 and are therefore encompassed in claims 1 and 4 of U.S. Patent No. 7,748,650.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 21,23-28,32 and 34-38 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Robinson.

Robinson discloses an attachment comprising all the featured elements of the instant invention, see Figures 1 and 2.

5. Claims 21,22,29,32 and 33 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Francis.

Art Unit: 3752

Francis discloses an attachment comprising all the featured elements of the instant invention, see Figures 1, 2 and 4.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 30,31,39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson.

Robinson discloses an attachment comprising all the featured elements of the instant invention, except for the outlet width and inlet height dimensions claimed. However, note that there is a differential between the outlet width and the inlet width, see Figure 2, and between the inlet height and the outlet height, see Figure 2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the outlet width 1.5 times larger than the inlet width and the inlet height twice as large as the outlet height, since the apparatus of Robinson clearly shows differentials and the specific limitations claimed could readily be modified and implemented in the device of Robinson by skilled artisan.

Art Unit: 3752

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN J. GANEY whose telephone number is (571)272-4899. The examiner can normally be reached on 9:00-5:00; Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/STEVEN J. GANEY/  
Primary Examiner  
Art Unit 3752

sjg

<b>Notice of References Cited</b>	Application/Control No. 12/620,327	Applicant(s)/Patent Under Reexamination SLOAN, HAYNES	
	Examiner STEVEN J. GANEY	Art Unit 3752	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A US-7,748,650	07-2010	Sloan, W. Haynes	239/593
	B US-			
	C US-			
	D US-			
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			

**FOREIGN PATENT DOCUMENTS**


*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

**NON-PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)				
	U				
	V				
	W				
	X				

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



<b>Index of Claims</b>  	<b>Application/Control No.</b> 12620327	<b>Applicant(s)/Patent Under Reexamination</b> SLOAN, HAYNES
	<b>Examiner</b> STEVEN J GANEY	<b>Art Unit</b> 3752

✓	<b>Rejected</b>
=	<b>Allowed</b>


-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	04/09/2012							
	1	-							
	2	-							
	3	-							
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	16	-							
	17	-							
	18	-							
	19	-							
	20	-							
	21	✓							
	22	✓							
	23	✓							
	24	✓							
	25	✓							
	26	✓							
	27	✓							
	28	✓							
	29	✓							
	30	✓							
	31	✓							
	32	✓							
	33	✓							
	34	✓							
	35	✓							
	36	✓							

<b>Index of Claims</b>  	<b>Application/Control No.</b> 12620327	<b>Applicant(s)/Patent Under Reexamination</b> SLOAN, HAYNES
	<b>Examiner</b> STEVEN J GANEY	<b>Art Unit</b> 3752


✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant		<input type="checkbox"/> CPA	<input type="checkbox"/> T.D.	<input type="checkbox"/> R.1.47					
CLAIM		DATE							
Final	Original	04/09/2012							
	37	✓							
	38	✓							
	39	✓							
	40	✓							

<b>Search Notes</b>  	<b>Application/Control No.</b>  12620327	<b>Applicant(s)/Patent Under Reexamination</b>  SLOAN, HAYNES
	<b>Examiner</b>  STEVEN J GANEY	<b>Art Unit</b>  3752

SEARCHED			
Class	Subclass	Date	Examiner
239	499,525,531,589,592,593,594,597,598,600,601	04/09/12	SJG
285	305,328,331,397,398,399,239,256,259	4/09/12	SJG
52	16	04/09/12	SJG
138	177	04/09/02	SJG

SEARCH NOTES		
Search Notes	Date	Examiner
TEXT AND INVENTORSHIP SEARCHED.	04/09/12	SJG

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

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Receipt date: 02/18/2010

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		12620327
	Filing Date		2009-11-17
	First Named Inventor	Haynes Sloan, Jr.	
	Art Unit	3751	
	Examiner Name	Unknown	
	Attorney Docket Number	002627	

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	0455910		1891-07-14	Gordon	
	2	0577362		1897-02-16	Ettlinger	
	3	0749232		1904-01-12	Shaw	
	4	1033195		1912-07-23	Robinson	
	5	1239373		1917-09-04	Farmer et al.	
	6	1273200		1918-07-23	Symonds	
	7	2116863		1938-05-10	Dinley	
	8	2397655		1946-04-02	Francis	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /SG/

Receipt date: 02/18/2010

Application Number	12620327
Filing Date	2009-11-17
First Named Inventor	Haynes Sloan, Jr.
Art Unit	3751
Examiner Name	Unknown
Attorney Docket Number	002627

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

9	2586145		1952-02-19	Breuer et al.	
10	2655408		1953-10-13	Williams	
11	2661225		1953-12-01	Lyon	
12	2814529		1957-11-26	Arnt	
13	3861419		1975-01-21	Johnson	
14	4112568		1978-09-12	Hale	
15	4247136		1981-01-27	Fouss et al.	
16	4273367		1981-06-16	Keeney et al.	
17	4480855		1984-11-06	Rosenbaum	
18	4575133		1986-03-11	Nattel	
19	4688720		1987-08-25	MacDonald	

Receipt date: 02/18/2010

Application Number	12620327
Filing Date	2009-11-17
First Named Inventor	Haynes Sloan, Jr.
Art Unit	3751
Examiner Name	Unknown
Attorney Docket Number	002627

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

	20	5031426		1991-07-16	Wilson	
	21	5150930		1992-09-29	Petty et al.	
	22	5332270		1994-07-26	Petty et al.	
	23	5358007		1994-10-25	Carlberg	
	24	5375891		1994-12-27	Sicotte	
	25	5387016		1995-02-07	Joseph et al.	
	26	5658092		1997-08-19	Sweers	
	27	5823580		1998-10-20	Ungerecht	
	28	5862632		1999-01-26	Zima	
	29	5915735		1999-06-29	Noble	
	30	6007110		1999-12-28	Amatsutsu	

<b>Receipt date: 02/18/2010</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		12620327	
	Filing Date		2009-11-17	
	First Named Inventor	Haynes Sloan, Jr.		
	Art Unit		3751	
	Examiner Name	Unknown		
	Attorney Docket Number		002627	

	31	6202358		2001-03-20	Janesky	
	32	6612075		2003-09-02	Knoop et al.	
	33	7017949		2006-03-28	Luft et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

**U.S.PATENT APPLICATION PUBLICATIONS**

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

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**FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> i	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1		<input type="checkbox"/>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	12620327
	Filing Date	2009-11-17
	First Named Inventor	Haynes Sloan, Jr.
	Art Unit	3751
	Examiner Name	Unknown
	Attorney Docket Number	002627

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**EXAMINER SIGNATURE**

Examiner Signature	/Steven Ganey/	Date Considered	04/09/2012
--------------------	----------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /SG/





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Table with 4 columns: APPLICATION NUMBER (12/620,327), FILING OR 371(C) DATE (11/17/2009), FIRST NAMED APPLICANT (Haynes Sloan JR.), ATTY. DOCKET NO./TITLE (9952-6IP)

20792
MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

CONFIRMATION NO. 1359
NONPUBLICATION RESCISSION
LETTER



Date Mailed: 04/06/2012

Communication Regarding Rescission Of
Nonpublication Request and/or Notice of Foreign Filing

Applicant's rescission of the previously-filed nonpublication request and/or notice of foreign filing is acknowledged. The paper has been reflected in the Patent and Trademark Office's (USPTO's) computer records so that the earliest possible projected publication date can be assigned.

The projected publication date is 07/12/2012.

If applicant rescinded the nonpublication request before or on the date of "foreign filing,"1 then no notice of foreign filing is required.

If applicant foreign filed the application after filing the above application and before filing the rescission, and the rescission did not also include a notice of foreign filing, then a notice of foreign filing (not merely a rescission) is required to be filed within 45 days of the date of foreign filing. See 35 U.S.C. § 122(b)(2)(B)(iii), and Clarification of the United States Patent and Trademark Office's Interpretation of the Provisions of 35 U.S.C. § 122(b)(2)(B)(ii)-(iv), 1272 Off. Gaz. Pat. Office 22 (July 1, 2003).

If a notice of foreign filing is required and is not filed within 45 days of the date of foreign filing, then the application becomes abandoned pursuant to 35 U.S.C. § 122(b)(2)(B)(iii). In this situation, applicant should either file a petition to revive or notify the Office that the application is abandoned. See 37 CFR 1.137(f). Any such petition to revive will be forwarded to the Office of Petitions for a decision. Note that the filing of the petition will not operate to stay any period of reply that may be running against the application.

Questions regarding petitions to revive should be directed to the Office of Petitions at (571) 272-3282.

1 Note, for purpose of this notice, that "foreign filing" means "filing an application directed to the same invention in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing".

/ttran/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Table with 4 columns: APPLICATION NUMBER (12/620,327), FILING OR 371(C) DATE (11/17/2009), FIRST NAMED APPLICANT (Haynes Sloan JR.), ATTY. DOCKET NO./TITLE (9952-6IP)

CONFIRMATION NO. 1359

NEW OR REVISED PPD NOTICE

20792
MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627



NOTICE OF NEW OR REVISED PROJECTED PUBLICATION DATE

The above-identified application has a new or revised projected publication date. The current projected publication date for this application is 07/12/2012. If this is a new projected publication date (there was no previous projected publication date), the application has been cleared by Licensing & Review or a secrecy order has been rescinded and the application is now in the publication queue.

If this is a revised projected publication date (one that is different from a previously communicated projected publication date), the publication date has been revised due to processing delays in the USPTO or the abandonment and subsequent revival of an application. The application is anticipated to be published on a date that is more than six weeks different from the originally-projected publication date.

More detailed publication information is available through the private side of Patent Application Information Retrieval (PAIR) System. The direct link to access PAIR is currently http://pair.uspto.gov. Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Questions relating to this Notice should be directed to the Office of Data Management, Application Assistance Unit at (571) 272-4000, or (571) 272-4200, or 1-888-786-0101.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>RESCISSION OF PREVIOUS NONPUBLICATION REQUEST</b> (35 U.S.C. 122(b)(2)(B)(ii)) <b>AND, IF APPLICABLE,</b> <b>NOTICE OF FOREIGN FILING</b> (35 U.S.C. 122(b)(2)(B)(iii))	Application Number		12/620,327
	Filing Date		11/17/2009
	First Named Inventor		Haynes Sloan JR.
	Title	Low Profile Attachment For Emitting Water ...	
	Atty Docket Number		9952-6IP
	Art Unit		3752
	Examiner		GANEY, STEVEN J

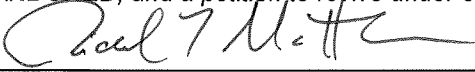
Send completed form to:  
**Mail Stop PG Pub**  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450  
 FAX: (571) 273-8300

A request that the above-identified application not be published under 35 U.S.C. 122(b) (nonpublication request) was included with the above-identified application on filing pursuant to 35 U.S.C. 122(b)(2)(B)(i).

I hereby **rescind** the previous nonpublication request.

If a notice of foreign or international filing is or will be required by 35 U.S.C. 122(b)(2)(B)(iii) and 37 CFR 1.213(c), I hereby provide such notice. This notice is being provided no later than forty-five (45) days after the date of such foreign or international filing.

*If a notice of subsequent foreign or international filing required by 35 U.S.C. 122(b)(2)(B)(iii) and 37 CFR 1.213(c) was not filed within forty-five (45) days after the date of filing of the foreign or international application, the application is ABANDONED, and a petition to revive under 37 CFR 1.137(b) is required. See 37 CFR 1.137(f).*

	04/02/2012
_____ Signature	_____ Date
Richard T. Matthews	53,284
_____ Typed or printed name	_____ Registration Number, if applicable
(919)854-1400	
_____ Telephone Number	

**This request must be signed in compliance with 37 CFR 1.33(b).**

If information or assistance is needed in completing this form, please contact the Pre-Grant Publication Division at (703)605-4283 or by e-mail at PGPub@USPTO.gov.

<b>CERTIFICATE OF MAILING OR TRANSMISSION</b>		
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop PG Pub, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.		
Signature		
Name (Print/Type)	Date	

This collection of information is required by 37 CFR 1.213(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop PG Pub, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	12447006
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	20792
<b>Filer:</b>	Richard Thomas Matthews/Rosa Brinson
<b>Filer Authorized By:</b>	Richard Thomas Matthews
<b>Attorney Docket Number:</b>	9952-6IP
<b>Receipt Date:</b>	02-APR-2012
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	14:23:57
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Rescind Nonpublication Request for Pre Grant Pub	20120402141638471.pdf	132227 <small>298d9eb214793cc1f068cd0df20780e8c7800957</small>	no	1

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**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**



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www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	Haynes Sloan JR.	4491-104

20792  
MYERS BIGEL SIBLEY & SAJOVEC  
PO BOX 37428  
RALEIGH, NC 27627

**CONFIRMATION NO. 1359**  
**POA ACCEPTANCE LETTER**



Date Mailed: 03/02/2012

**NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 02/24/2012.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/snguyen/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	Haynes Sloan JR.	4491-104

**CONFIRMATION NO. 1359**

**POWER OF ATTORNEY NOTICE**

23448  
Hultquist IP  
P.O. Box 14329  
RESEARCH TRIANGLE PARK, NC 27709



Date Mailed: 03/02/2012

**NOTICE REGARDING CHANGE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 02/24/2012.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/snguyen/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

## POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

Practitioners associated with the Customer Number: 20792

OR  
 Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number		Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

Assignee Name and Address:  
 InvisaFlow, LLC  
 1350 Bluegrass Lakes Parkway  
 Alpharetta, GA 30004

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

**SIGNATURE of Assignee of Record**

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	2/9/12
Name	Jim Horton	Telephone	
Title	President		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: W. Haynes Sloan (9952-6IP)

Application No./Patent No.: 12/620,327 Filed/Issue Date: November 17, 2009

Titled: Low Profile Attachment for Emitting Water with Connector for Corrugated Pipe

Invisiflow LLC, a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

- 1.  the assignee of the entire right, title, and interest in;
- 2.  an assignee of less than the entire right, title, and interest in  
(The extent (by percentage) of its ownership interest is \_\_\_\_\_ %); or
- 3.  the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)  
the patent application/patent identified above, by virtue of either:

A.  An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 025844, Frame 0319, or for which a copy therefore is attached.

OR

B.  A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

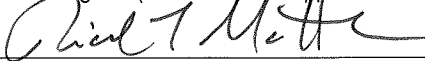
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet(s).

As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

  
Signature

February 28, 2012  
Date

Richard T. Matthews  
Printed or Typed Name

Attorney of Record  
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	12179975
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	23448
<b>Filer:</b>	Stephen Petroski/Joyce Adair
<b>Filer Authorized By:</b>	Stephen Petroski
<b>Attorney Docket Number:</b>	4491-104
<b>Receipt Date:</b>	28-FEB-2012
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	15:58:37
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	9952-6IP-POA.pdf	271804 <small>569254d373ef38597811250de1c2f0d1a29a01ef</small>	no	2

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**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

## POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

Practitioners associated with the Customer Number: 20792

OR  
 Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number		Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

Assignee Name and Address:  
 InvisiFlow, LLC  
 1350 Bluegrass Lakes Parkway  
 Alpharetta, GA 30004

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/98 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

**SIGNATURE of Assignee of Record**

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	2/9/12
Name	Jim Horton	Telephone	
Title	President		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	12152408
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	23448
<b>Filer:</b>	Stephen Petroski/Joyce Adair
<b>Filer Authorized By:</b>	Stephen Petroski
<b>Attorney Docket Number:</b>	4491-104
<b>Receipt Date:</b>	24-FEB-2012
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	13:03:55
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	9952-6IP.pdf	147852 <small>6b8e7ac0d3f1c9268ce0053889b6ca768b5ee746</small>	no	1

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**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent Application of:	)	Docket No.:	4491-104
Applicants: SLOAN, W. HAYNES	)	Conf. No.:	1359
Application No.: 12/620,327	)	Art Unit:	3752
Date Filed: November 17, 2009	)	Examiner:	Ganey, Steven J.
	)		
Title: LOW PROFILE	)	Customer No.:	
ATTACHMENT FOR	)		
EMITTING WATER WITH	)		23448
CONNECTOR FOR	)		
CORRUGATED PIPE	)		

CERTIFICATE OF EFS FILING

I hereby certify that this document is being filed via EFS in the United States Patent and  
Trademark Office on December 22, 2011.  
/kelly k. reynolds/

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**PRELIMINARY AMENDMENT IN U.S. PATENT APPLICATION NO. 12/620,327**

---

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Prior to examination of the above-identified new U.S. patent application, please amend the application as set out in **Section I (Amendments to the Claims)** hereof. Remarks concerning the amendments to the specification and claims are set out in **Section II (Remarks)** hereof.

**Section I. (Amendments to the Claims)**

Please cancel claims 1-20, without prejudice.

Please add new claims 21 – 40, as set forth below.

1. – 20. (Cancelled)

21. (New) An attachment for reducing erosion and directing water from a water source, the attachment comprising:

an inlet end including an intake opening, the intake opening comprising an inlet width and an inlet height;

an outlet end comprising an outlet width and an outlet height, wherein the outlet width is greater than the outlet height; and

a transitional section between the inlet end and the outlet end, wherein the transitional section comprises an outwardly diverging flaring shape increasing in width towards the outlet end and wherein the outlet width is greater than the inlet width;

and wherein the attachment is effective to reduce erosion.

22. (New) The attachment of claim 21, further comprising an elongated rectangular section between the transitional section and the outlet end.

23. (New) The attachment of claim 21, further comprising a collection area adapted to collect water and widen a stream of water flowing through the attachment.

24. (New) The attachment of claim 21, further comprising a support rib.

25. (New) The attachment of claim 21, further comprising ribbed type extensions along an outer surface of the attachment.

26. (New) The attachment of claim 21, wherein the intake opening is adapted to fit the water source.

27. (New) The attachment of claim 26, wherein the water source comprises any one of a pipe and down spout.



28. (New) The attachment of claim 21, wherein the inlet end comprises any one of a circular shape, a polygonal shape, and an elliptical shape.
29. (New) The attachment of claim 21, wherein the outwardly flaring shape transitions into a rectangular shape.
30. (New) The attachment of claim 21, wherein the outlet width is at least 1.5 times larger than the inlet width.
31. (New) The attachment of claim 21, wherein the inlet height is at least twice as large as the outlet height.
32. (New) A gravity flow drainage attachment for directing water from a water source, the attachment comprising:
- an inlet end including an intake opening comprising an inlet width and an inlet height;
  - an outlet end adapted to reduce erosion, the outlet end comprising an outlet width and outlet height, wherein the outlet width is greater than the outlet height; and
  - a transitional section between the inlet end and the outlet end, wherein the transitional section increases in width and reduces in height towards the outlet end and wherein the outlet width is greater than the inlet width;
  - and wherein the attachment is effective to reduce erosion.
33. (New) The attachment of claim 32, further comprising an elongated rectangular section between the transitional section and the outlet end.
34. (New) The attachment of claim 32, further comprising a support rib.
35. (New) The attachment of claim 32, further comprising ribbed type extensions along an outer surface of the attachment.
36. (New) The attachment of claim 32, wherein the intake opening is adapted to fit the water source.
37. (New) The attachment of claim 36, wherein the water source comprises any one of a pipe and down spout.

38. (New) The attachment of claim 32, wherein the inlet end comprises any one of a circular shape, a polygonal shape, and an elliptical shape.
39. (New) The attachment of claim 32, wherein the outlet width is at least 1.5 times larger than the inlet width.
40. (New) The attachment of claim 32, wherein the inlet height is at least twice as large as the outlet height.

**Section II. (Remarks)****A. Regarding the Specification**

Provided herewith is a substitute specification in accordance with 37 CFR §1.125 and MPEP 608.01. The substance of the substitute specification is supported in full by the priority application U.S. Patent Application No. 12/262,621 (now U.S. Patent No. 7,748,650). Both a clean copy and a marked up copy of the specification are provided. No new matter within the meaning of 35 U.S.C. §132 has been introduced by the substitute specification.

Entry of the substitute specification is respectfully requested.

**B. Regarding the Claims**

By the present amendment, claims 1-20 have been canceled, without prejudice.

Claims 21-40 have been added, as set forth in the above Complete Listing of the Claims. As amended, the claims are supported by the specification and the original claims. No new matter has been added, as defined by 35 U.S.C. § 132.

Thus, upon entry of the amendments, claims 21-40 will be pending.

**C. Regarding the Figures**

Enclosed and submitted herewith are drawing sheets 1/4 to 4/4 [4 total pages], inclusive of Figures 1-8 of the application. Each of sheets 1 to 4 is labeled in the heading as "REPLACEMENT SHEET," in accordance with the requirements of 37 C.F.R. §1.121.

The Replacement Drawing Sheets include all Figures for the present application and are intended to replace all prior Figures submitted in the application. Upon entry of this preliminary amendment, Figures 1-8 provide the complete set of figures for the application.

The substance of the new drawing sheets is supported in full by the priority application U.S. Patent Application No. 12/262,621 (now U.S. Patent No. 7,748,650). The drawing sheets are identical to the formal figures in issued U.S. Patent No. 7,748,650. No new matter has been added, as defined by 35 U.S.C. § 132, by the new drawing sheets.

CONCLUSION

It is requested that examination of this application proceed on the basis of the specification, drawings and pending claims 21-40 of the application, as added herein.

No fees are believed to be due for the filing of this paper. However, should any fees be required or an overpayment of fees made, please debit or credit our Deposit Account No. 08-3284, as necessary.

If any issues require further resolution, the examiner is requested to contact the undersigned attorney at (919) 419-9350, so that the examination of the application can be expedited.

Respectfully submitted,

/kelly k. reynolds/

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## Electronic Acknowledgement Receipt

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<b>Confirmation Number:</b>	1359
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<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	23448
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Drawings-only black and white line drawings	Replacement_Figs.pdf	442427 <small>f3559bb7b4166ef9b68d4edea24b45a3fe3f6f7a</small>	no	4

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2		Substitute_Spec_Marked_up.pdf	95655 98623680010ae3fcc7c6a5659cc113fa5947282d	yes	17
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	<b>Document Description</b>		<b>Start</b>	<b>End</b>	
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	Abstract		17	17	
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3		Substitute_Spec_Clean.pdf	65192 738d8ef8cb661fe731193ed4838476a79708a832	yes	12
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	Specification		1	11	
	Abstract		12	12	
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4	Preliminary Amendment	prelim_amend.pdf	35014 8998cc7bcb874fd9197e29f9cab4660dca72fff6	no	6
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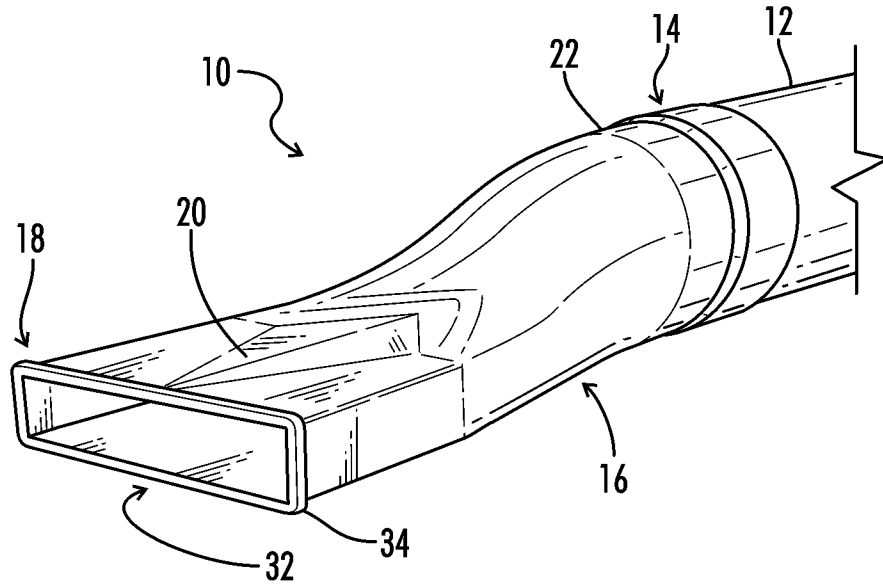
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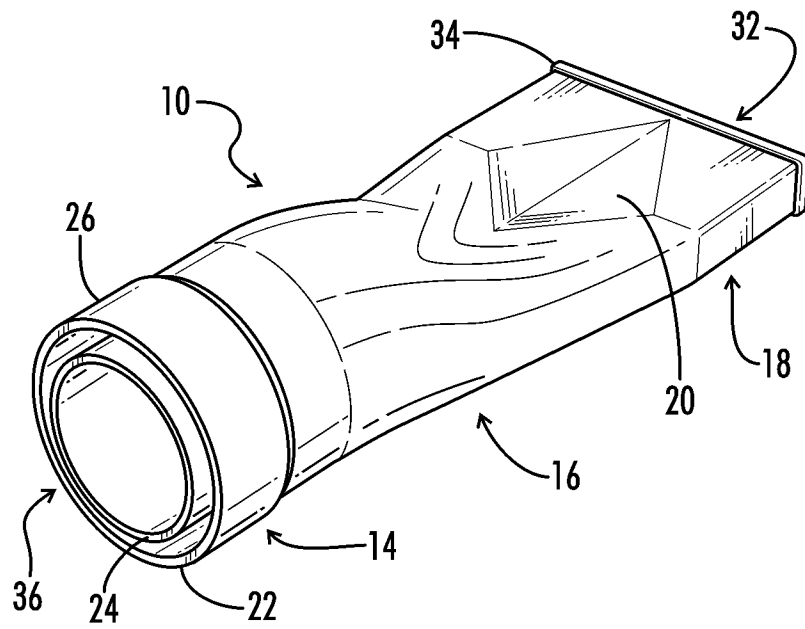
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# REPLACEMENT SHEET

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**FIG. 1**



**FIG. 2**

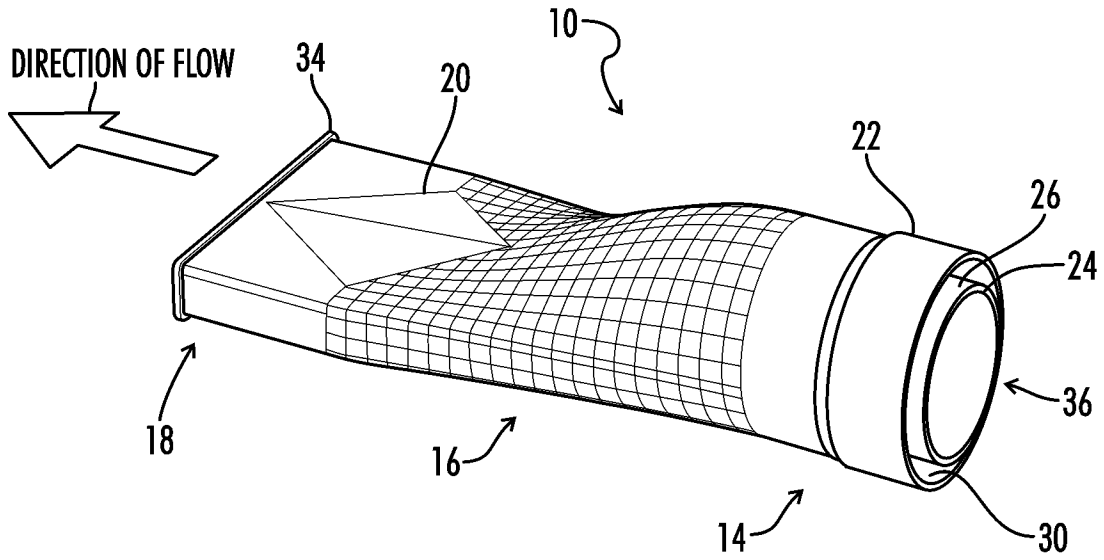
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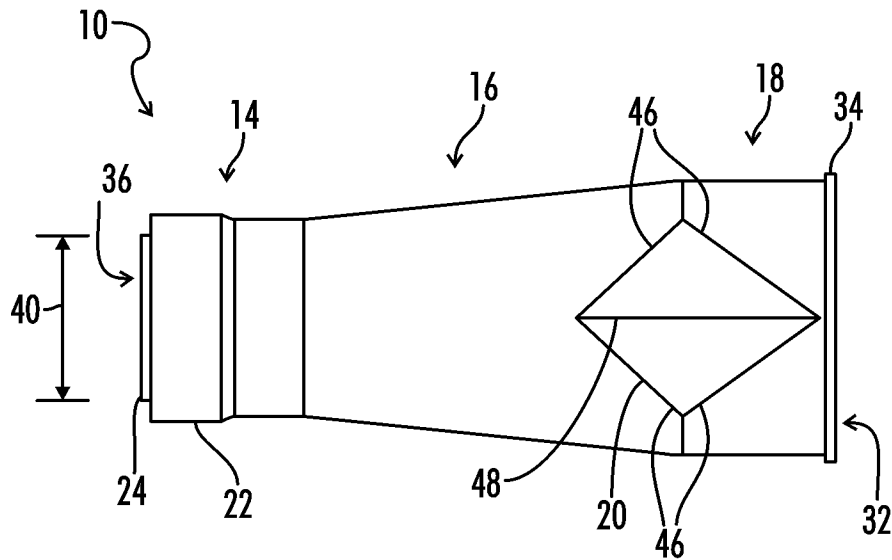
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# REPLACEMENT SHEET

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**FIG. 3**



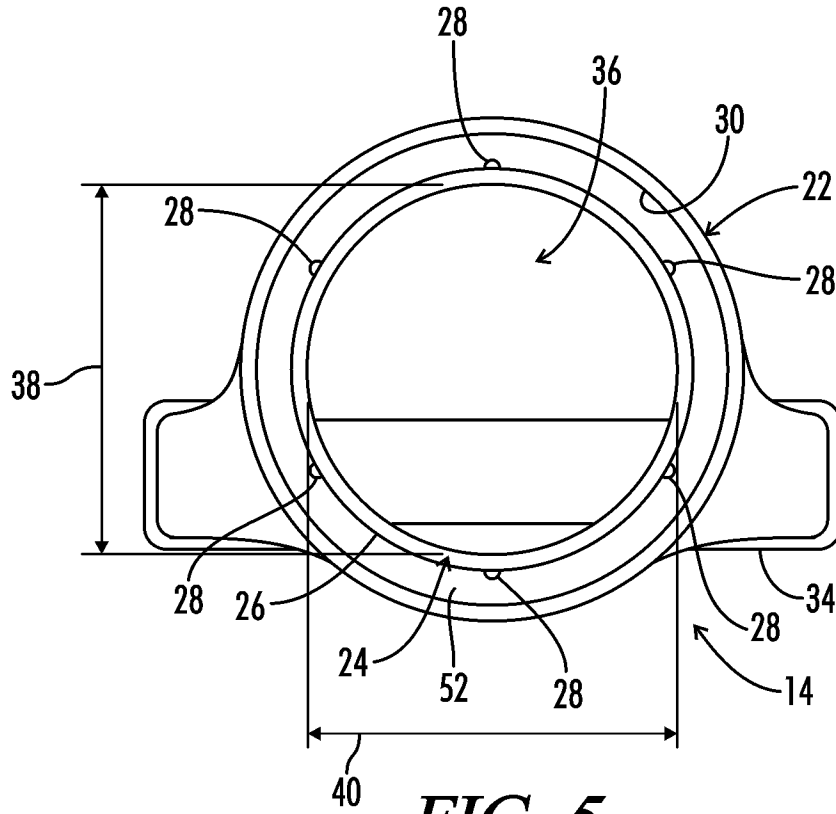
**FIG. 4**

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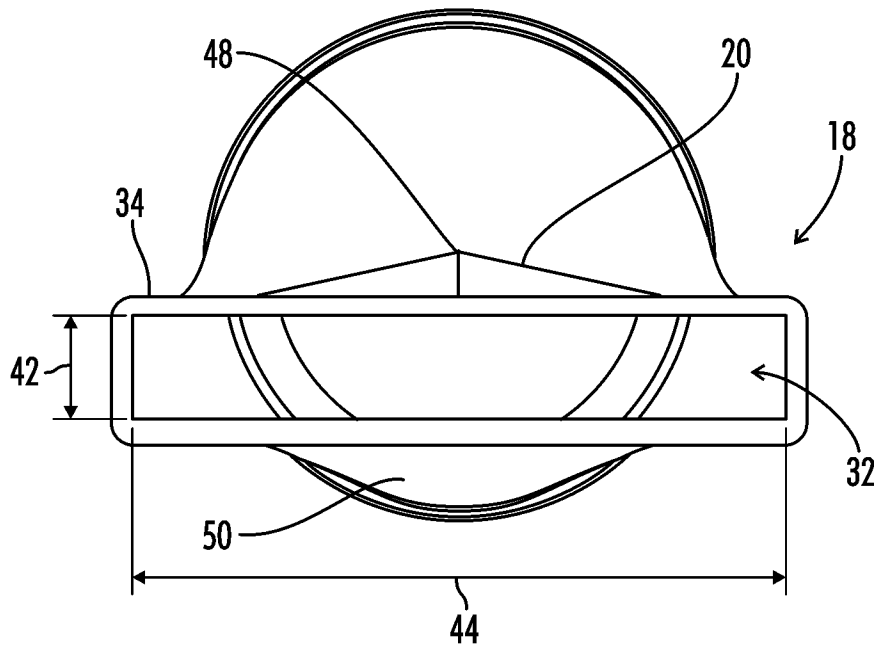
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**FIG. 5**



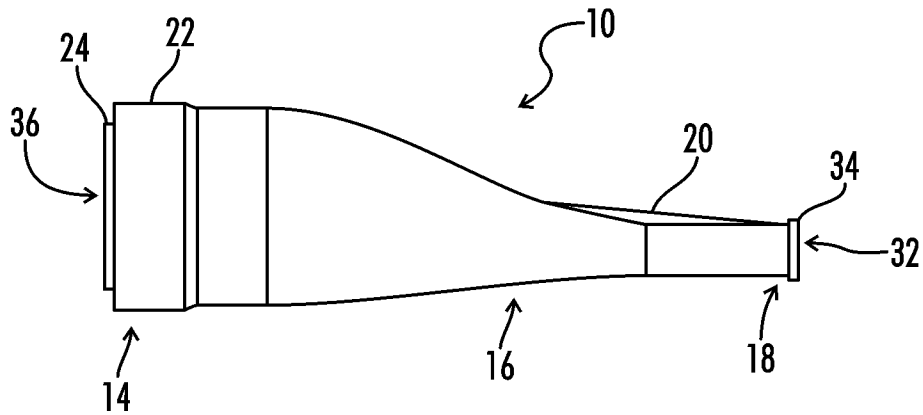
**FIG. 6**

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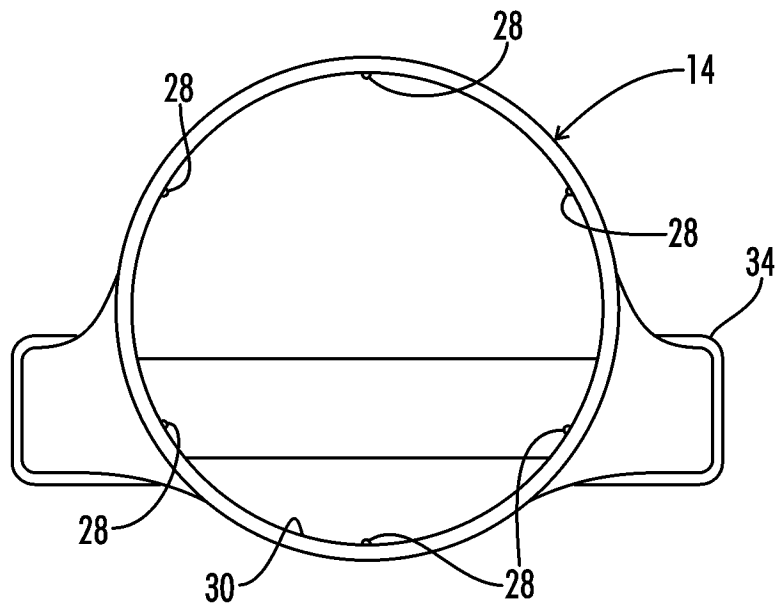
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**FIG. 7**



**FIG. 8**

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## LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE

### CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part application which claims benefit of U.S. Patent Application Serial No. 121262,621 filed October 31, 2008 entitled "Low Profile Attachment For Emitting Water" which is a continuation application of U.S. Patent Application Serial No. 111561,313 filed November 17, 2006 entitled "Low Profile Drain Pipe Emitter", now U.S. Patent No. 7,458,532 issued December 2, 2008, both of which are hereby incorporated by reference[[:]].

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[0003] All patents and publications described herein are hereby incorporated by reference in their entirety.

### ~~BACKGROUND OF THE INVENTION~~

#### 1. Field of the Invention

#### FIELD OF THE INVENTION

[0004] The present invention relates generally to an attachment for emitting water from a water source, and more specifically, but not by way of limitation, to a drain pipe attachment that has a low profile design to emit water from a pipe or down\_spout.

2. Background of the Invention

BACKGROUND OF THE INVENTION

[0005] Numerous prior art attachment designs exist to direct water flowing from pipes and down\_spouts on buildings. These prior art designs have attempted to manipulate the outflow of water from the pipes and down\_spouts in order to increase the flow efficiency of the water or transfer the water to a different location.

[0006] However, almost all of the prior art patents fail to adequately provide an apparatus which properly disperses the water away from the down spout or pipe and maintains the water dispersing apparatus in such a manner to keep the prior art water dispersing apparatus from interfering with operations and maintenance around the water dispersing apparatus. For example, U.S. Patent Nos. 2,814,529, 3,861,419, and 5,358,007, require manual manipulation of the water dispersing apparatus to move these prior art devices out of the way when maintenance or other operations are required around those prior art down\_spouts or water dispersing devices.

[0007] Other prior art devices have attempted to position the water outlet attachment in the surrounding structure or the ground. However, these prior art devices failed to adequately maintain the structural integrity of the water outlet device in order to maintain the water flow from the pipe or down spout. For example, U.S. Pat. No. 2,397,655 lacks any reinforcing feature designed to strengthen the device and requires structural support from the surrounding materials in to which it is inserted in order to maintain a proper water exit opening height for the drain pipe.

[0008] The current invention is an improvement over the old designs in several ways. For example, the current invention adds a structural support element build into the water emitting attachment in order to maintain the dimensions of the outlet end of the attachment. Also, the inlet end of the current invention facilitates engagement of the water emitting attachment to a corrugated pipe or down\_spout through inclusion of ~~projections mounted on resilient fingers~~ ribbed attachment members spaced around the inlet end of the current invention. Also, the outlet end of the current invention is an improvement over these prior art devices through the improved water emitting design that increases the fluid dynamic flow out of the outlet end of the current invention thereby reducing erosion around the outlet end of the current invention.

[0009] Thus, there is a need in the art for a low profile attachment ~~which easily and securely attaches to corrugated pipes or downspouts~~ with increased structural integrity for efficiently emitting water from a pipe or down spout.

### BRIEF SUMMARY OF THE INVENTION

[00010] The present invention provides an attachment for emitting water from a water source. The attachment comprises an inlet end, a transitional section connected to the inlet end, ~~and~~ an outlet end connected to the transitional section opposite from the inlet end. ~~The inlet end includes an intake opening and the outlet end includes a dispersion opening. The intake opening has an inlet height and the dispersion opening has an outlet height, the outlet height being less than the inlet height. The inlet end also includes a plurality of resilient fingers where two or more of the fingers include a lateral projection. The resilient fingers and lateral projections of the inlet end are provided to engage the ribs of a corrugated pipe for removably securing the attachment to the corrugated pipe.~~

and a reinforcement member attached to the transitional sectional and the outlet end to support the transitional section. The inlet end includes an external cover and an internal sleeve disposed within and spaced from the external cover.

[00011] The internal sleeve of the drain pipe attachment includes a plurality of attachment members spaced along the outer surface. The attachment members are positioned to removably secure the water source to the drain pipe attachment. The outlet end includes a dispersing opening and a support rim supporting the dispersion opening. In this embodiment the outlet height is smaller than the inlet height and the outlet width is larger than the inlet width.

[00012] The invention is designed to lower the exit height of drain pipes and down\_spouts. The invention provides a less obtrusive exit from the pipe or down spout. This lowered exit area facilitates maintenance around the exit area of the pipe or down\_spout and reduces erosion of the surrounding surface near the exit of the water source to which the invention is attached.

[00013] The invention has numerous uses in water dispersion areas. For example, the invention can be utilized in such areas as over the top of curbs, into boundary swells, from landscaping beds onto the lawn, onto the tops of sidewalks and driveways, in flat elevations, and in sloping grades.

[0010] In one embodiment, this invention is designed to have an outlet end height that is approximately 75 percent lower than the exit height of other conventional drain pipe/down\_spout attachments. However, the current invention still allows a smooth flow of water out of the dispersion, or exit, opening without increasing the effective erosion on the ground surrounding the exit opening.

[0011] When placed in a manner such that the outlet end of the attachment extends out into a yard or landscaped area, maintenance and lawn care around the outlet end is easily accomplished due to the fact that a mower can mow over the outlet end without damaging the mower or the invention.

[0012] Accordingly, it is an object of the present invention to provide an improved attachment for emitting water from a water source.

[0013] Another object of the present invention is to provide a water emitting attachment that has an outlet opening that is shorter in height than the height of the inlet opening.

[0014] Another object of the present invention is to provide a water emitting attachment that has an outlet opening that has a low profile exit height.

[0015] Another object of the present invention is to provide a water emitting attachment that has an outlet opening that facilitates maintenance around the exit of the attachment without the need for repositioning of the attachment.

[0016] Yet another object of the present invention is to provide a water emitting attachment adapted to direct water from a pipe or downspout.

[0017] Still yet another object of the present invention is to provide an attachment for emitting water that ~~can easily be secured~~ contains a self reinforcing section to a corrugated pipe or downspout promote the retention of the size of the outlet opening of the attachment.



[0018] Numerous other objects, features, and advantages of the present invention will be readily apparent to those skilled in the art, upon a reading of the following disclosure, when taken in conjunction with the accompanying drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0019] Fig. 1 is a side perspective view of an embodiment of the present invention showing the outlet end~~a water emitting apparatus.~~

[0020] Fig. 2 ~~is a top view of the embodiment of Fig. 1~~ is a perspective view of one embodiment of the current invention showing the inlet end.

[0021] Fig. 3 is a side perspective view of the current invention. ~~embodiment of Fig. 1 as attached to a corrugated pipe. Fig. 3 shows an embodiment in which the lateral projections of the inlet end extend radially outward and engage the ribs of the corrugated pipe from the inside details the transitional section and the direction of flow of water through the current invention.~~

[0022] Fig. 4 ~~is shows~~ a side top view of another embodiment as attached to a corrugated pipe. Fig. 4 shows an embodiment in which the lateral projections of the inlet end extend radially inward and engage the ribs of the corrugated pipe from the outside the current invention.

[0023] Fig. 5 ~~is shows~~ an end view of the current invention. Fig. 5 details one embodiment of the inlet end of the embodiment of Fig. 1 current invention, including the external cover, internal sleeve, and plurality of attachment members.

[0024] Fig. 6 ~~is shows~~ an end view of the ~~inlet~~ outlet end of the embodiment of Fig. 4 current invention.

[0025] Fig. 7 is an end view of the outlet end of the embodiment of Fig. 1.

[0026] Fig. 8 ~~is~~ shows a side view of a resilient finger and lateral projection of the embodiment of Fig. 1.

~~[0027] Fig. 9 is a top view of the resilient finger and lateral projection of Fig. 8.~~

~~[0028] Fig. 10 is a cross-sectional view of a length of corrugated pipe showing the resilient finger and lateral projection of Fig. 8 as the water emitting apparatus is being attached to the corrugated pipe.~~

~~[0029] Fig. 11 is a cross-sectional view similar to Fig. 10, after the water emitting apparatus is in place within the corrugated pipe.~~

#### DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0030] Referring now to the drawings, and particularly to Fig. 1, an attachment for emitting water is shown and generally designated by the numeral 10. The attachment 10 can also be described as a low profile exit emitter 10, a drain pipe attachment 10, or a down\_spout attachment 10. The attachment 10 for emitting water (not shown) from a water source 12 comprises an inlet end 14, a transitional section 16 connected to the inlet end 14, ~~and~~ an outlet end 18 connected to the transitional section 16 opposite from the inlet end 14. ~~The transitional section 16 provides a geometric transition from the inlet end 14 to the outlet end 18.~~ The inlet end 14, also described as a universal received 14, of the attachment 10 accepts water from the water source 12 and allows that water to pass through the transitional section 16 and to the outlet end 18 where the water exits the attachment 10.

[0031] In a preferred embodiment, the inlet end 14 includes an external cover 22 and an internal sleeve 24 disposed within and spaced from the external cover 22. The external cover 22 and internal sleeve 24 are designed to match the water

source 12 in order to facilitate the movement of the water from the water source 12 to the attachment 10. The water source 12 fits between the external cover 22 and internal sleeve 24. This placement allows the free flow of water from the water source 12 through the inlet end 14 of the attachment 10.

[0032] As seen in FIG. 5, the internal sleeve 24 includes an outer surface 26 and a plurality of attachment members 28 spaced along the outer surface 26 and positioned to removably secure the water source 12 to the inlet end 14 of the attachment 12. The attachment members 28 are ribbed type extensions along the outer surface 26 of the internal sleeve 24. In alternate embodiments, the attachment members 28 can include slots designed to accept the water source 12, buckles, snaps, hooks, and other fasteners known to one skilled in the art to secure two items together.

[0033] The inlet end 14 can be configured in various ways to facilitate the engagement between the attachment 10 and the water source 12. For example, the internal sleeve 24 can surround the water source 12 in order to define the engagement between the attachment 10 and the water source 12. Also, as seen in FIG. 8, the external cover 22 can contain a plurality of attachment members 28 spaced along the interior surface 30 of the external cover 22. These attachment members 28 can engage the water source 12 in order to facilitate the attachment between the water source 12 and the inlet end 14 of the attachment 10.

[0034] The shape of the inlet end 14 can vary in order to correspond with and attach to the water source 12. For example, the inlet end 14 can have a circular shape, a polygonal shape, an elliptical shape, and other shapes that correspond to the form of the water source 12.

[0035] Additionally, inlet end 14 can include a center point 54 wherein the dispersion opening 32 of the outlet end 18 is positioned below the center point 54. This facilitates the low profile design of the attachment 10.

[0036] Due to the design of the outlet end 18, the effects of erosion are reduced when the current invention is used to disperse water. This reduction occurs due to the fact that the attachment 10 disperses the fluid exiting the outlet end 10 of the attachment 18 over a wider area than the area of dispersion of most conventional devices used for water dispersion in association with a pipe or down spout. The size of the outlet width 44 of the outlet end 18 slows the speed of the water exiting the water source, thereby reducing the effects of erosion on the surrounding area.

[0037] The outlet end 18 includes a dispersion opening 32, also called an outlet opening 32, and a support rim 34 surrounding and supporting the dispersion opening 32. The support rim 34, also described as a support rib 34, enhances the durability of the outlet end 18, and especially the dispersion opening 32. The support rim 34 can vary in size depending on the external forces applied on the dispersion opening 32 in a manner as to close the dispersion opening 32. The support rim 34 helps to maintain the size of the dispersion opening 32 by providing support to the dispersion opening 32 to counteract the closing effect that external forces apply to the dispersion opening 32.

[0038] The inlet end 14 includes an intake opening 36. The intake opening 36 includes an inlet height 38, also called an inlet vertical dimension 38, and inlet width 40. The outlet end 18 includes a dispersion opening 32 having an outlet height 42, also called an outlet vertical dimension 42, and an outlet width 44. The relationship between the inlet height 38 and the outlet height 42, as well as the

relationship between the inlet width 40 and the outlet width 44, can vary according to different embodiments of the current invention and still maintain the spirit of the invention.

[0039] For example, in one of the embodiments the outlet width 44 is at least 1.5 times larger than the inlet width 40. In another embodiment, the inlet height 38 is at least twice as large as the outlet height 42. In another embodiment, the inlet height 38 is designed to accept 3 inch or 4 inch diameter piping from a water source 12. The attachment 10 then transitions to an outlet height 42 of 1.5 inches tall and outlet width 44 of 6 inches long. Preferably, the outlet vertical dimension 42 is substantially less than the inlet vertical dimension 38.

[0040] The reinforcement member 20 is designed to support the transitional section 16 and potentially the outlet end 18 without necessarily engaging the outlet end 18. The reinforcement 20 can be attached to the transitional section 16 and the outlet end 18 and can span the connection between the transitional section 16 and the outlet end 18.

[0041] The reinforcement member 20 has a diamond, or pyramid, shaped appearance that increases in mass from the edges 46 of the reinforcement member 20 to a peak point 48. The design of the reinforcement member 20 strengthens the intermediate area between the outlet end 18 and the transitional section 16. This allows the apparatus 10 to be placed in the ground or under other objects that apply pressure and/or weight onto the attachment 10. The reinforcement member 20 helps to maintain the cross-sectional area of the outlet end 18. This facilitates a smooth flow of the water out the outlet end 18. The shape and the location of the reinforcement member 20 can vary from different embodiments of the current invention. The reinforcement member 20 however,

needs to maintain a location such that it can support the transitional section 16 and the outlet end 18 to maintain proper spacing of the outlet end of the dispersing opening 32 of the outlet end 18.

[0042] FIG. 3 details the transition from the inlet end 14 to the outlet end 18 through the transitional section 16. The transitional section 16 provides a geometric transition from a circular inlet end 14 to a rectangular outlet end 18. This figure also shows the preferred direction of flow of the water passing through the attachment 10.

[0043] The attachment 10 includes a collection area 50 designed to collect a small amount of water as it passes through the attachment 10. This collection area 50 effectively widens the stream of water as the water passes through the attachment 10 and decreases erosion of the area near the outlet end 18. Also, the attachment 10 includes a base 52 designed to engage the water source 12 as the water source 12 fully engages the inlet end 14. This base 52 gives the user of the attachment 10 a reference point in which to connect the water source 12 with the attachment 10.

[0044] ~~With reference to Fig. 5, the inlet end 14 includes an intake opening 20 having an inlet height 22. Similarly, with reference to Fig. 7, the outlet end 18 includes a dispersion opening 24 having an outlet height 26, the outlet height 26 being less than the inlet height 22. The inlet end 14 further includes a plurality of resilient fingers 28, two or more of the fingers 28 including a lateral projection 30.~~

[0045] ~~It is not necessary that every resilient finger 28 have a lateral projection 30. In the embodiment shown in Fig. 5, by way of example, two fingers 28 with projections 30 are alternated with one finger 28 without a projection 30.~~

[0046]— In one embodiment, each of the projections 30 includes a first surface 32 making a first angle of incline 34 to the resilient finger 28. In this embodiment each projection 30 will also include a second surface 36 making a second angle of incline 38 to the resilient finger 28. In this embodiment, the first surface 32 is farther from the outlet end 18 than the second surface 36, and the first angle of incline 34 is less than the second angle of incline 38.

[0047]— As best illustrated by Fig. 8, the first surface 32 and the second surface 36 join so that the shape of the projections 30 is generally a triangular prism having two triangular faces 40. The shape of the projections 30 will only generally be that of a triangular prism. In any real embodiment the shape will not and need not be perfect. Thus, due to manufacturing defects or the need to interface the shape of the projections 30 with that of the resilient fingers 28 or that of the inlet end 14, the edges or surfaces may be curved and the vertices or angles may be blunted and not perfectly sharp. Similarly, that the faces 40 are described as triangular should not imply that their shape will be that of a perfect triangle.

[0048]— The triangular faces 40 of this embodiment can be described as having a base length 42 and a projection height 44. In a preferred embodiment, the base length 42 will be between about one half of an inch and about two inches. Similarly, the projection height 44 will be between about one eighth of an inch and about three eighths of an inch. These dimensions provide an effective interface with the most common types of corrugated pipes or down spouts.

[0049]— One skilled in the art will note that the triangular shape of the projections 30 is not essential for the function of the invention and that other shapes might be used. Nonetheless, such other shapes could similarly be described by a base length 42 and a projection height 44. In such other embodiments, it may still be

advantageous to provide a base length 42 between about one half of an inch and about two inches and a projection height 44 between about one eighth of an inch and about three eighths of an inch.

[0050]— Fig. 5 illustrates the embodiment of Figs. 1-3 wherein the projections 30 extend radially outward. Similarly, Fig. 6 illustrates the embodiment of Fig. 4 wherein the projections 30 extend radially inward. In one embodiment, for attaching to the most common varieties of corrugated drain pipe, the intake opening 20 will have a generally circular shape. Of course, the shape will be only generally and not perfectly circular.

[0051]— For providing a low profile attachment 10, an embodiment of the present invention may have an inlet height 22 that is at least twice as large as the outlet height 26. Similarly, the outlet height 26 may be made less than about two inches.

[0052]— Although one skilled in the art will note that the resilient fingers 28 may be arranged in a variety of ways around the inlet end 14, in one embodiment, best illustrated in Fig. 1, the resilient fingers 28 are spaced around the intake opening 20 and extend longitudinally from the intake opening 20.

[0053]— In many applications, the water source 12 will be a length of corrugated pipe including longitudinally spaced, circumferentially extending ribs 46. In some corrugated pipes 12, the longitudinally spaced, circumferentially extending ribs 46 may be arranged spirally, while in other pipes the ribs 46 may be arranged annularly. The pipe may be described as having a conduit height 48. In such applications, the attachment 10, which may also be described as an emitter 10, may be combined with a length of corrugated pipe 12 to form a low profile water emitter assembly 50.



[0054]— In one embodiment of such an emitter assembly 50, as best illustrated in Fig. 3, the inlet end 14 of the emitter 10 will have projections 30 which extend radially outward. In such an embodiment, the emitter 10 will be inserted into the length of corrugated pipe 12 such that the projections 30 engage the ribs 46 of the corrugated pipe 12 from the inside. An alternative embodiment of the emitter assembly 50 is shown in Fig. 4, where the projections 30 of the inlet end 14 of the emitter 10 project radially inward. In this embodiment, the emitter 10 will be positioned over and around the corrugated pipe 12 such that the projections 30 engage the ribs 46 of the corrugated pipe 12 from the outside.

[0055]— Figs. 10 and 11 best illustrate the action of the resilient fingers 28 and the projections 30 as the inlet end 14 of the attachment 10 or emitter 10 is inserted into the water source 12 or corrugated pipe 12. As illustrated in Fig. 10, the resilient fingers 28 will be deflected as the inlet end 14 of the emitter 10 is inserted into the water source 12. Fig. 11 shows the state of the resilient finger 28 once the inlet end 14 has been inserted into the water source 12 securing the attachment 10 to the water source 12.

[0056]— As can be appreciated from Fig. 11, the lesser angle of incline 34 allows the first surface 32 to have a gentler slope than that of the second surface 36. This relationship between the slopes of the surfaces of the projection 30 in the preferred embodiment makes it easier to insert the attachment 10 into the water source 12 than to remove it. Thus the preferred embodiment allows a connection between the attachment 10 and the water source 12 that is at the same time easy to install and yet a secure connection.

[0057] The attachment 10 is used in a gravity flow, surface drainage system and is designed to attach to a water source 12 that is comprises a four-3 inch

diameter pipe, a 4 inch diameter pipe, or a 4 inch diameter corrugated pipe. The attachment 10 is also designed to attach to a down spout that directs water from a building. The attachment 10 can also be designed to attach to any shaped down spout known by one skilled in the art to attach to other drain pipes or downspouts while direct water away from a building and still maintaining its inventive spirit.

[0058] The attachment 10 is ~~preferably made~~composed of polymers, but can be ~~made~~composed of metal, ceramic, ~~polyvinylchloride,~~polyvinyl chloride or other comparable materials.

[0059] In ~~one~~a preferred embodiment, the overall length of the ~~emitter~~apparatus 10 is ~~15-718~~18.25 inches long. The outlet end 18 ~~has a curved~~is rectangular in shape and measures ~~3-14 inch~~1.5 inches tall by 36.6 inches wide. The ~~inlet end~~ 14 ~~has a generally circular shape and has a diameter of 4-112 inches~~ The internal sleeve 24 has an internal diameter of 3.63 inches and the outer surface 26 has an exterior diameter of 5.0 inches. The reinforcement member 20 extends back 6.5 inches towards the transitional section 16 and increase in height from the outlet width 44 to the peak pint 48 in a 12 degree measurement. The support rim 34 extends 0.25 inches from the dispersing opening 32 and extends backwards 0.25 inches from the dispersing opening 32.

[0060] Thus, it is seen that the apparatus of the present invention readily achieves the ends and advantages mentioned as well as those inherent therein. While certain preferred embodiments of the invention have been illustrated and described for purposes of the present disclosure, numerous changes in the arrangement and construction of parts may be made by those skilled in the art,

which changes are encompassed within the scope and spirit of the present invention as defined by the appended claims.

## ABSTRACT OF THE DISCLOSURE

The present invention provides an attachment for emitting water from a water source. The attachment comprises an inlet end, a transitional section connected to the inlet end ~~and~~ an outlet end connected to the transitional section opposite from the inlet end. ~~The inlet end also includes a plurality of resilient fingers, two or more of the fingers including a lateral projection.~~ , and a reinforcement member attached to the transitional section and the outlet end to support the transitional section. The inlet end includes an external cover and an internal sleeve disposed within and spaced from the external cover.

## LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE

### CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part application which claims benefit of U.S. Patent Application Serial No. 121262,621 filed October 31, 2008 entitled "Low Profile Attachment For Emitting Water" which is a continuation application of U.S. Patent Application Serial No. 111561,313 filed November 17, 2006 entitled "Low Profile Drain Pipe Emitter", now U.S. Patent No. 7,458,532 issued December 2, 2008, both of which are hereby incorporated by reference.

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[0003] All patents and publications described herein are hereby incorporated by reference in their entirety.

### FIELD OF THE INVENTION

[0004] The present invention relates generally to an attachment for emitting water from a water source, and more specifically, but not by way of limitation, to a drain pipe attachment that has a low profile design to emit water from a pipe or down spout.

### BACKGROUND OF THE INVENTION

[0005] Numerous prior art attachment designs exist to direct water flowing from pipes and down spouts on buildings. These prior art designs have attempted to manipulate the outflow of water from the pipes and down spouts in order to increase the flow efficiency of the water or transfer the water to a different location.

[0006] However, almost all of the prior art patents fail to adequately provide an apparatus which properly disperses the water away from the down spout or pipe and maintains the water dispersing apparatus in such a manner to keep the prior art water dispersing apparatus from interfering with operations and maintenance around the water dispersing apparatus. For example, U.S. Patent Nos. 2,814,529, 3,861,419, and 5,358,007, require manual manipulation of the water dispersing apparatus to move these prior art devices out of the way when maintenance or other operations are required around those prior art down spouts or water dispersing devices.

[0007] Other prior art devices have attempted to position the water outlet attachment in the surrounding structure or the ground. However, these prior art devices failed to adequately maintain the structural integrity of the water outlet device in order to maintain the water flow from the pipe or down spout. For example, U.S. Pat. No. 2,397,655 lacks any reinforcing feature designed to strengthen the device and requires structural support from the surrounding materials in to which it is inserted in order to maintain a proper water exit opening height for the drain pipe.

[0008] The current invention is an improvement over the old designs in several ways. For example, the current invention adds a structural support element build into the water emitting attachment in order to maintain the

dimensions of the outlet end of the attachment. Also, the inlet end of the current invention facilitates engagement of the water emitting attachment to a pipe or down spout through inclusion of ribbed attachment members spaced around the inlet end of the current invention. Also, the outlet end of the current invention is an improvement over these prior art devices through the improved water emitting design that increases the fluid dynamic flow out of the outlet end of the current invention thereby reducing erosion around the outlet end of the current invention.

[0009] Thus, there is a need in the art for a low profile attachment with increased structural integrity for efficiently emitting water from a pipe or down spout.

### SUMMARY OF THE INVENTION

[00010] The present invention provides an attachment for emitting water from a water source. The attachment comprises an inlet end, a transitional section connected to the inlet end, an outlet end connected to the transitional section opposite from the inlet end, and a reinforcement member attached to the transitional section and the outlet end to support the transitional section. The inlet end includes an external cover and an internal sleeve disposed within and spaced from the external cover.

[00011] The internal sleeve of the drain pipe attachment includes a plurality of attachment members spaced along the outer surface. The attachment members are positioned to removably secure the water source to the drain pipe attachment. The outlet end includes a dispersing opening and a support rim supporting the dispersion opening. In this embodiment the outlet height is smaller than the inlet height and the outlet width is larger than the inlet width.

[00012] The invention is designed to lower the exit height of drain pipes and down spouts. The invention provides a less obtrusive exit from the pipe or down spout. This lowered exit area facilitates maintenance around the exit area of the pipe or down spout and reduces erosion of the surrounding surface near the exit of the water source to which the invention is attached.

[00013] The invention has numerous uses in water dispersion areas. For example, the invention can be utilized in such areas as over the top of curbs, into boundary swells, from landscaping beds onto the lawn, onto the tops of sidewalks and driveways, in flat elevations, and in sloping grades.

[0010] In one embodiment, this invention is designed to have an outlet end height that is approximately 75 percent lower than the exit height of other conventional drain pipe/down spout attachments. However, the current invention still allows a smooth flow of water out of the dispersion, or exit, opening without increasing the effective erosion on the ground surrounding the exit opening.

[0011] When placed in a manner such that the outlet end of the attachment extends out into a yard or landscaped area, maintenance and lawn care around the outlet end is easily accomplished due to the fact that a mower can mow over the outlet end without damaging the mower or the invention.

[0012] Accordingly, it is an object of the present invention to provide an improved attachment for emitting water from a water source.

[0013] Another object of the present invention is to provide a water emitting attachment that has an outlet opening that is shorter in height than the height of the inlet opening.



[0014] Another object of the present invention is to provide a water emitting attachment that has an outlet opening that has a low profile exit height.

[0015] Another object of the present invention is to provide a water emitting attachment that has an outlet opening that facilitates maintenance around the exit of the attachment without the need for repositioning of the attachment.

[0016] Yet another object of the present invention is to provide a water emitting attachment adapted to direct water from a pipe or down spout.

[0017] Still yet another object of the present invention is to provide an attachment for emitting water that contains a self reinforcing section to promote the retention of the size of the outlet opening of the attachment.

[0018] Numerous other objects, features, and advantages of the present invention will be readily apparent to those skilled in the art, upon a reading of the following disclosure, when taken in conjunction with the accompanying drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0019] Fig. 1 is a perspective view of an embodiment of the present invention showing the outlet end.

[0020] Fig. 2 is a perspective view of one embodiment of the current invention showing the inlet end.

[0021] Fig. 3 is a perspective view of the current invention. Fig. 3 details the transitional section and the direction of flow of water through the current invention.

[0022] Fig. 4 shows a top view of the current invention.

[0023] Fig. 5 shows an end view of the current invention. Fig. 5 details one embodiment of the inlet end of the current invention, including the external cover, internal sleeve, and plurality of attachment members.

[0024] Fig. 6 shows an end view of the outlet end of the current invention.

[0025] Fig. 7 is an end view of the outlet end of the embodiment of Fig. 1.

[0026] Fig. 8 shows a side view of a resilient finger and lateral projection of the embodiment of Fig. 1.

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0027] Referring now to the drawings, and particularly to Fig. 1, an attachment for emitting water is shown and generally designated by the numeral 10. The attachment 10 can also be described as a low profile exit emitter 10, a drain pipe attachment 10, or a down spout attachment 10. The attachment 10 for emitting water (not shown) from a water source 12 comprises an inlet end 14, a transitional section 16 connected to the inlet end 14, an outlet end 18 connected to the transitional section 16 opposite from the inlet end 14. The inlet end 14, also described as a universal received 14, of the attachment 10 accepts water from the water source 12 and allows that water to pass through the transitional section 16 and to the outlet end 18 where the water exits the attachment 10.

[0028] In a preferred embodiment, the inlet end 14 includes an external cover 22 and an internal sleeve 24 disposed within and spaced from the external cover 22. The external cover 22 and internal sleeve 24 are designed to match the water source 12 in order to facilitate the movement of the water from the water source 12 to the attachment 10. The water source 12 fits between the external cover 22

and internal sleeve 24. This placement allows the free flow of water from the water source 12 through the inlet end 14 of the attachment 10.

[0029] As seen in FIG. 5, the internal sleeve 24 includes an outer surface 26 and a plurality of attachment members 28 spaced along the outer surface 26 and positioned to removably secure the water source 12 to the inlet end 14 of the attachment 12. The attachment members 28 are ribbed type extensions along the outer surface 26 of the internal sleeve 24. In alternate embodiments, the attachment members 28 can include slots designed to accept the water source 12, buckles, snaps, hooks, and other fasteners known to one skilled in the art to secure two items together.

[0030] The inlet end 14 can be configured in various ways to facilitate the engagement between the attachment 10 and the water source 12. For example, the internal sleeve 24 can surround the water source 12 in order to define the engagement between the attachment 10 and the water source 12. Also, as seen in FIG. 8, the external cover 22 can contain a plurality of attachment members 28 spaced along the interior surface 30 of the external cover 22. These attachment members 28 can engage the water source 12 in order to facilitate the attachment between the water source 12 and the inlet end 14 of the attachment 10.

[0031] The shape of the inlet end 14 can vary in order to correspond with and attach to the water source 12. For example, the inlet end 14 can have a circular shape, a polygonal shape, an elliptical shape, and other shapes that correspond to the form of the water source 12.

[0032] Additionally, inlet end 14 can include a center point 54 wherein the dispersion opening 32 of the outlet end 18 is positioned below the center point 54. This facilitates the low profile design of the attachment 10.

[0033] Due to the design of the outlet end 18, the effects of erosion are reduced when the current invention is used to disperse water. This reduction occurs due to the fact that the attachment 10 disperses the fluid exiting the outlet end 10 of the attachment 18 over a wider area than the area of dispersion of most conventional devices used for water dispersion in association with a pipe or down spout. The size of the outlet width 44 of the outlet end 18 slows the speed of the water exiting the water source, thereby reducing the effects of erosion on the surrounding area.

[0034] The outlet end 18 includes a dispersion opening 32, also called an outlet opening 32, and a support rim 34 surrounding and supporting the dispersion opening 32. The support rim 34, also described as a support rib 34, enhances the durability of the outlet end 18, and especially the dispersion opening 32. The support rim 34 can vary in size depending on the external forces applied on the dispersion opening 32 in a manner as to close the dispersion opening 32. The support rim 34 helps to maintain the size of the dispersion opening 32 by providing support to the dispersion opening 32 to counteract the closing effect that external forces apply to the dispersion opening 32.

[0035] The inlet end 14 includes an intake opening 36. The intake opening 36 includes an inlet height 38, also called an inlet vertical dimension 38, and inlet width 40. The outlet end 18 includes a dispersion opening 32 having an outlet height 42, also called an outlet vertical dimension 42, and an outlet width 44. The relationship between the inlet height 38 and the outlet height 42, as well as the relationship between the inlet width 40 and the outlet width 44, can vary according to different embodiments of the current invention and still maintain the spirit of the invention.

[0036] For example, in one of the embodiments the outlet width 44 is at least 1.5 times larger than the inlet width 40. In another embodiment, the inlet height 38 is at least twice as large as the outlet height 42. In another embodiment, the inlet height 38 is designed to accept 3 inch or 4 inch diameter piping from a water source 12. The attachment 10 then transitions to an outlet height 42 of 1.5 inches tall and outlet width 44 of 6 inches long. Preferably, the outlet vertical dimension 42 is substantially less than the inlet vertical dimension 38.

[0037] The reinforcement member 20 is designed to support the transitional section 16 and potentially the outlet end 18 without necessarily engaging the outlet end 18. The reinforcement 20 can be attached to the transitional section 16 and the outlet end 18 and can span the connection between the transitional section 16 and the outlet end 18.

[0038] The reinforcement member 20 has a diamond, or pyramid, shaped appearance that increases in mass from the edges 46 of the reinforcement member 20 to a peak point 48. The design of the reinforcement member 20 strengthens the intermediate area between the outlet end 18 and the transitional section 16. This allows the apparatus 10 to be placed in the ground or under other objects that apply pressure and/or weight onto the attachment 10. The reinforcement member 20 helps to maintain the cross-sectional area of the outlet end 18. This facilitates a smooth flow of the water out the outlet end 18. The shape and the location of the reinforcement member 20 can vary from different embodiments of the current invention. The reinforcement member 20 however, needs to maintain a location such that it can support the transitional section 16 and the outlet end 18 to maintain proper spacing of the outlet end of the dispersing opening 32 of the outlet end 18.

[0039] FIG. 3 details the transition from the inlet end 14 to the outlet end 18 through the transitional section 16. The transitional section 16 provides a geometric transition from a circular inlet end 14 to a rectangular outlet end 18. This figure also shows the preferred direction of flow of the water passing through the attachment 10.

[0040] The attachment 10 includes a collection area 50 designed to collect a small amount of water as it passes through the attachment 10. This collection area 50 effectively widens the stream of water as the water passes through the attachment 10 and decreases erosion of the area near the outlet end 18. Also, the attachment 10 includes a base 52 designed to engage the water source 12 as the water source 12 fully engages the inlet end 14. This base 52 gives the user of the attachment 10 a reference point in which to connect the water source 12 with the attachment 10.

[0041] The attachment 10 is used in a gravity flow, surface drainage system and is designed to attach to a water source 12 that comprises a 3 inch diameter pipe, a 4 inch diameter pipe, or a 4 inch diameter corrugated pipe. The attachment 10 is also designed to attach to a down spout that directs water from a building. The attachment 10 can be designed to attach to any shaped down spout known by one skilled in the art to direct water away from a building and still maintain its inventive spirit.

[0042] The attachment 10 is composed of polymers, but can be composed of metal, ceramic, polyvinyl chloride or other comparable materials.

[0043] In a preferred embodiment, the overall length of the apparatus 10 is 18.25 inches long. The outlet end 18 is rectangular in shape and measures 1.5 inches tall by 6.6 inches wide. The internal sleeve 24 has an internal diameter of

3.63 inches and the outer surface 26 has an exterior diameter of 5.0 inches. The reinforcement member 20 extends back 6.5 inches towards the transitional section 16 and increase in height from the outlet width 44 to the peak pint 48 in a 12 degree measurement. The support rim 34 extends 0.25 inches from the dispersing opening 32 and extends backwards 0.25 inches from the dispersing opening 32.

[0044] Thus, it is seen that the apparatus of the present invention readily achieves the ends and advantages mentioned as well as those inherent therein. While certain preferred embodiments of the invention have been illustrated and described for purposes of the present disclosure, numerous changes in the arrangement and construction of parts may be made by those skilled in the art, which changes are encompassed within the scope and spirit of the present invention as defined by the appended claims.

## ABSTRACT OF THE DISCLOSURE

The present invention provides an attachment for emitting water from a water source. The attachment comprises an inlet end, a transitional section connected to the inlet end an outlet end connected to the transitional section opposite from the inlet end, and a reinforcement member attached to the transitional sectional and the outlet end to support the transitional section. The inlet end includes an external cover and an internal sleeve disposed within and spaced from the external cover.



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APPLICATION AS FILED – PART I			OTHER THAN SMALL ENTITY				
	(Column 1)	(Column 2)	SMALL ENTITY <input checked="" type="checkbox"/>	OR			
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)
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	Total (37 CFR 1.16(i))	* 20	Minus ** 20	= 0	X \$30 =	0	OR	X \$ =	
	Independent (37 CFR 1.16(h))	* 2	Minus *** 3	= 0	X \$125 =	0	OR	X \$ =	
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Legal Instrument Examiner:  
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	Haynes Sloan JR.	4491-104

**CONFIRMATION NO. 1359**

**POA ACCEPTANCE LETTER**

23448  
Hultquist IP  
P.O. Box 14329  
RESEARCH TRIANGLE PARK, NC 27709



Date Mailed: 08/04/2011

**NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 07/21/2011.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/sleutchit/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	Haynes Sloan JR.	002627

23456  
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**CONFIRMATION NO. 1359**  
**POWER OF ATTORNEY NOTICE**



Date Mailed: 08/04/2011

**NOTICE REGARDING CHANGE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 07/21/2011.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

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**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Haynes Sloan, Jr.

Application No./Patent No.: 12/620,327 Filed/Issued Date: November 17, 2009

Titled:

InvisaFlow, LLC, a Limited liability company  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

- 1.  the assignee of the entire right, title, and interest; or
- 2.  an assignee of less than the entire right, title, and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %
- 3.  the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made) the patent application/patent identified above, by virtue of either:
  - A.  An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel/Frame 025844/0318, or for which a copy thereof is attached.

OR

B.  A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

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As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Richard T. Matthews  
Signature

July 21, 2011  
Date

Richard T. Matthews  
Printed or Typed Name

Attorney for Applicant(s)  
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

Practitioners associated with the Customer Number: 23448

AND

Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent application assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please recognize or change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

The address associated with Customer Number: 23448

OR

Firm or Individual Name: \_\_\_\_\_

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City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

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Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Assignee Name and Address:  
 InvisaFlow, LLC  
 1350 Bluegrass Lakes Parkway  
 Alpharetta, GA 30004

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73 (b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

**SIGNATURE of Assignee of Record**  
 The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature	<i>James R. Horton</i>	Date	7/23/11
Name	James Horton	Telephone	678 640-8885
Title and Company	President, InvisaFlow, LLC		

NOTE: Signatures of all the inventors or assignee or record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.52 and 1.53. The information is required to obtain or retain a benefit by the public which is to be (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 5 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. (DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent Application of:	)	Docket No.:	4491-104
Applicants: HAYNES SLOAN, JR.	)	Conf. No.:	1359
Application No.: 12/620,327	)	Art Unit:	3751
Date Filed: November 17, 2009	)	Examiner:	Not yet assigned
Title: LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE	)	Customer No.:	23448

**FACSIMILE TRANSMISSION CERTIFICATE**

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4 Pages

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Katie Pope

July 21, 2011

Date

**SUBMISSION OF POWER OF ATTORNEY AND STATEMENT UNDER  
37 CFR 3.73(b) FOR U.S. PATENT APPLICATION NO. 12/620,327**

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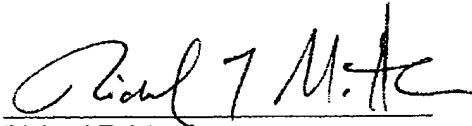
Sir:

Enclosed and submitted herewith is a Power of Attorney to Prosecute Applications before the USPTO (Form PTO/SB/80) appointing new attorneys, including those associated with PTO Customer Number 23448. Also enclosed is a Statement under 37 CFR 3.73(b) (Form

4491-104

PTO/SB/96) for the above-identified U.S. patent application.

Respectfully submitted,



Richard T. Matthews  
Reg. No. 53,284  
Attorney for Applicants

HULTQUIST IP  
P.O. BOX 14329  
RTP, NC 27709  
Phone: (919) 419-9350  
Fax: (919) 419-9354  
Attorney File No.: 4491-104

**Enclosures:**

**Power of Attorney to Prosecute Applications Before USPTO (Form PTO/SB/80) [1 pg.]**  
**Statement under 37 CFR 3.73(b) (Form PTO/SB/96) [1 pg.]**

The USPTO is hereby authorized to charge any deficiency or credit any overpayment of fees properly payable for this document to Deposit Account No. 08-3284



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UNITED STATES DEPARTMENT OF COMMERCE  
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Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	Haynes Sloan JR.	002627

**CONFIRMATION NO. 1359**

**MISCELLANEOUS NOTICE**

23456  
WADDEY & PATTERSON, P.C.  
1600 DIVISION STREET, SUITE 500  
NASHVILLE, TN 37203



Date Mailed: 07/19/2011

A communication which cannot be delivered in electronic form has been mailed to the applicant.




**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/620,327	11/17/2009	Haynes Sloan JR.	002627

**CONFIRMATION NO. 1359**


\*OC000000048828360\*

23456  
 WADDEY & PATTERSON, P.C.  
 1600 DIVISION STREET, SUITE 500  
 NASHVILLE, TN 37203

Cc: HULTQUIST IP  
 P.O. BOX 14329  
 RESEARCH TRIANGLE PARK, NC 27709

Date Mailed: 07/19/2011

**DENIAL OF REQUEST FOR POWER OF ATTORNEY**

The request for Power of Attorney filed 07/13/2011 is acknowledged. However, the request cannot be granted at this time for the reason stated below.

- The Power of Attorney you provided did not comply with the new Power of Attorney rules that became effective on June 25, 2004. See 37 CFR 1.32.
- The revocation is not signed by the applicant, the assignee of the entire interest, or one particular principal attorney having the authority to revoke.
- The Power of Attorney is from an assignee and the Certificate required by 37 CFR 3.73(b) has not been received.
- The person signing for the assignee has omitted their empowerment to sign on behalf of the assignee.
- The inventor(s) is without authority to appoint attorneys since the assignee has intervened as provided by 37 CFR 3.71.
- The signature(s) of \_\_\_\_\_, a co-inventor in this application, has been omitted. The Power of Attorney will be entered upon receipt of confirmation signed by said co-inventor(s).
- The person(s) appointed in the Power of Attorney is not registered to practice before the U.S. Patent and Trademark Office.

Questions relating to this Notice should be directed to the Application Assistance Unit.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO**

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

Practitioners associated with the Customer Number: 23448

AND

Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent application assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please recognize or change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

This address associated with Customer Number: 23448

OR

Firm or Individual Name:

Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Country: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Assignee Name and Address:  
 InvisaFlow, LLC  
 1380 Bluegrass Lakes Parkway  
 Alpharetta, GA 30004

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73 (b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

**SIGNATURE of Assignee of Record**  
 The individual whose signature and title is supplied below is authorized to act on behalf of the assignee.

Signature: <i>James R. Horton</i>	Date: <i>7/13/11</i>
Name: <i>James Horton</i>	Telephone: <i>678-440-6985</i>
Title and Company: <i>President, InvisaFlow, LLC</i>	

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 102 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-8199 and select option 2.

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	10507058
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	23456
<b>Filer:</b>	Richard Thomas Matthews
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	002627
<b>Receipt Date:</b>	13-JUL-2011
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	11:28:23
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
------------------------	----

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	Declaration_and_Power_of_Attorney_12620327_13JUL11.pdf	286981 <small>820752ed527702f8ea1c9b74b757be4054ef0ebd</small>	no	1

### Warnings:

### Information:

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



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Table with 7 columns: APPLICATION NUMBER, FILING or 371(c) DATE, GRP ART UNIT, FIL FEE REC'D, ATTY. DOCKET NO, TOT CLAIMS, IND CLAIMS. Row 1: 12/620,327, 11/17/2009, 3751, 462, 002627, 20, 3

CONFIRMATION NO. 1359

UPDATED FILING RECEIPT

23456
WADDEY & PATTERSON, P.C.
1600 DIVISION STREET, SUITE 500
NASHVILLE, TN 37203



Date Mailed: 02/24/2010

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Applicant(s)

Haynes Sloan JR., Gallatin, TN;

Power of Attorney: The patent practitioners associated with Customer Number 23456

Domestic Priority data as claimed by applicant

This application is a CIP of 12/262,621 10/31/2008
which is a CON of 11/561,313 11/17/2006 PAT 7,458,532

Foreign Applications

If Required, Foreign Filing License Granted: 11/30/2009

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US 12/620,327

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No

\*\* SMALL ENTITY \*\*

**Title**

Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe

**Preliminary Class**

004

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

**LICENSE FOR FOREIGN FILING UNDER**

**Title 35, United States Code, Section 184**

**Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

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The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		12620327
	Filing Date		2009-11-17
	First Named Inventor	Haynes Sloan, Jr.	
	Art Unit		3751
	Examiner Name	Unknown	
	Attorney Docket Number		002627

U.S.PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1	0455910		1891-07-14	Gordon		
	2	0577362		1897-02-16	Ettlinger		
	3	0749232		1904-01-12	Shaw		
	4	1033195		1912-07-23	Robinson		
	5	1239373		1917-09-04	Farmer et al.		
	6	1273200		1918-07-23	Symonds		
	7	2116863		1938-05-10	Dinley		
	8	2397655		1946-04-02	Francis		



**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		12620327
Filing Date		2009-11-17
First Named Inventor	Haynes Sloan, Jr.	
Art Unit		3751
Examiner Name	Unknown	
Attorney Docket Number		002627

	9	2586145		1952-02-19	Breuer et al.	
	10	2655408		1953-10-13	Williams	
	11	2661225		1953-12-01	Lyon	
	12	2814529		1957-11-26	Arnt	
	13	3861419		1975-01-21	Johnson	
	14	4112568		1978-09-12	Hale	
	15	4247136		1981-01-27	Fouss et al.	
	16	4273367		1981-06-16	Keeney et al.	
	17	4480855		1984-11-06	Rosenbaum	
	18	4575133		1986-03-11	Nattel	
	19	4688720		1987-08-25	MacDonald	

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Art Unit		3751
Examiner Name	Unknown	
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	20	5031426		1991-07-16	Wilson	
	21	5150930		1992-09-29	Petty et al.	
	22	5332270		1994-07-26	Petty et al.	
	23	5358007		1994-10-25	Carlberg	
	24	5375891		1994-12-27	Sicotte	
	25	5387016		1995-02-07	Joseph et al.	
	26	5658092		1997-08-19	Sweers	
	27	5823580		1998-10-20	Ungerecht	
	28	5862632		1999-01-26	Zima	
	29	5915735		1999-06-29	Noble	
	30	6007110		1999-12-28	Amatsutsu	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	12620327
Filing Date	2009-11-17
First Named Inventor	Haynes Sloan, Jr.
Art Unit	3751
Examiner Name	Unknown
Attorney Docket Number	002627

31	6202358		2001-03-20	Janesky	
32	6612075		2003-09-02	Knoop et al.	
33	7017949		2006-03-28	Luft et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

**U.S.PATENT APPLICATION PUBLICATIONS**

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

**FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> j	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1		<input type="checkbox"/>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	12620327
	Filing Date	2009-11-17
	First Named Inventor	Haynes Sloan, Jr.
	Art Unit	3751
	Examiner Name	Unknown
	Attorney Docket Number	002627

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	12620327
Filing Date	2009-11-17
First Named Inventor	Haynes Sloan, Jr.
Art Unit	3751
Examiner Name	Unknown
Attorney Docket Number	002627

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

None

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Phillip E. Walker, 52,336/	Date (YYYY-MM-DD)	2010-02-18
Name/Print	Phillip E. Walker	Registration Number	52,336

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	7039706
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	23456
<b>Filer:</b>	Phillip E. Walker
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	002627
<b>Receipt Date:</b>	18-FEB-2010
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	16:05:41
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
------------------------	----

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed (SB/08)	Information_Disclosure_Statement_12620327_002627.pdf	613180 <small>41380b980c9f0f2f95bfcdf6a575b649a5c2196d</small>	no	7

### Warnings:

### Information:

**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Haynes Sloan Jr.  
Serial No.: 12/620,327  
Filed: November 17, 2009  
For: Low Profile Attachment For Emitting Water with  
Connector For Corrugated Pipe  
Group Art Unit: 3751  
Examiner: Unknown  
Attorney's Docket No.: 002627  
Customer No.: 23456

**SUBMISSION OF RESPONSE TO NOTICE TO FILE CORRECTED  
APPLICATION PAPERS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Submitted VIA USPTO EFS

Dear Commissioner:

This is in response to the Notice to File Corrected Application Paper - Filing Date Granted mailed December 7, 2009. Included herewith are formal replacement drawings submitted on three (3) pages.

The Commissioner is authorized to charge any deficiency or credit any overpayment associated with the filing of this Amendment and Response to Deposit Account 23-0035.

Respectfully submitted,

*Phillip E. Walker, 52,336*

Phillip E. Walker - Reg. No. 52,336  
Wadley & Patterson, P.C.  
Customer No. 23456  
1600 Division Street, Suite 500  
Roundabout Plaza  
Nashville, TN 37203  
(615) 242-2400

**CERTIFICATE OF ELECTRONIC TRANSMISSION**

Page 1

I certify that this paper and/or fee was transmitted to the United States Patent and Trademark Office using the EFS-Web filing system on February 8, 2010 by 11:59 CST (Local Time).

*Phillip E. Walker, 52,336*

Phillip E. Walker, 52,336

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	6968304
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	Haynes Sloan
<b>Customer Number:</b>	23456
<b>Filer:</b>	Phillip E. Walker
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	002627
<b>Receipt Date:</b>	08-FEB-2010
<b>Filing Date:</b>	17-NOV-2009
<b>Time Stamp:</b>	14:16:47
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Drawings-only black and white line drawings	Formal_Drawings_002627.pdf	108419 <small>3835d83b61d1b06811ea2060a7bb449b21295aed</small>	no	3

### Warnings:

### Information:

2	Applicant Response to Pre-Exam Formalities Notice	Response_to_Notice_to_File_Corrected_App_Papers_002627.pdf	38883 a3a7d3606018823dafafa6f9b7692b45821e3a94	no	1
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**Warnings:**

**Information:**

<b>Total Files Size (in bytes):</b>	147302
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**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

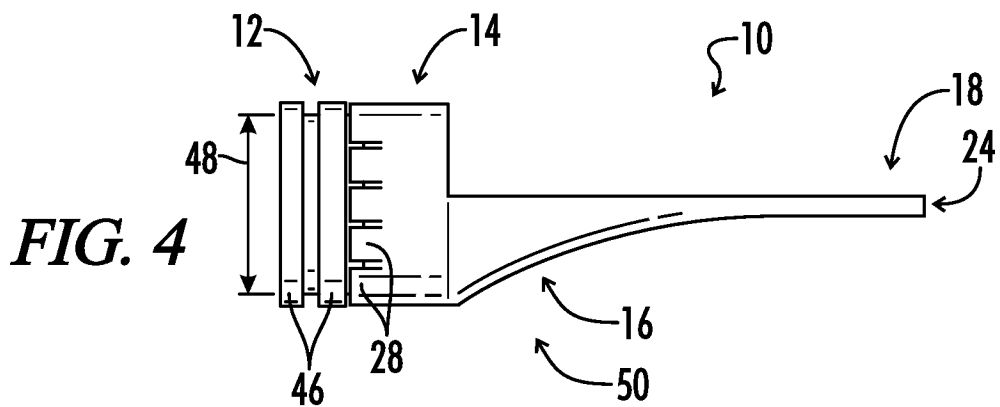
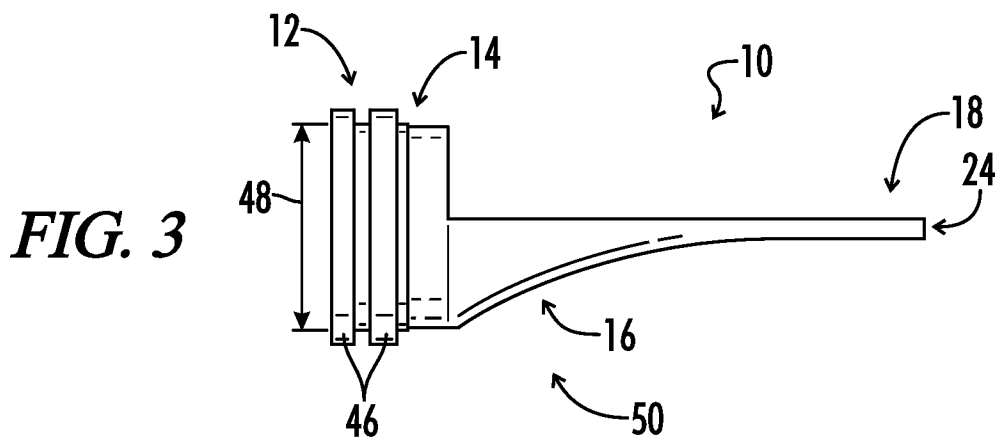
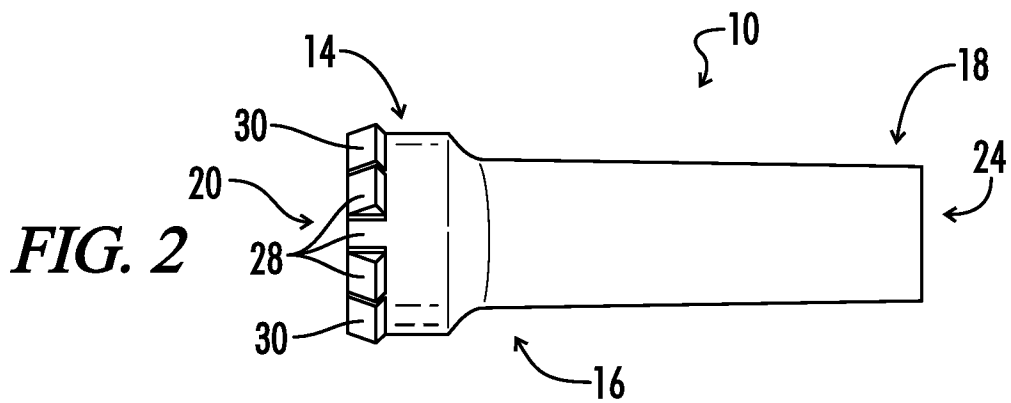
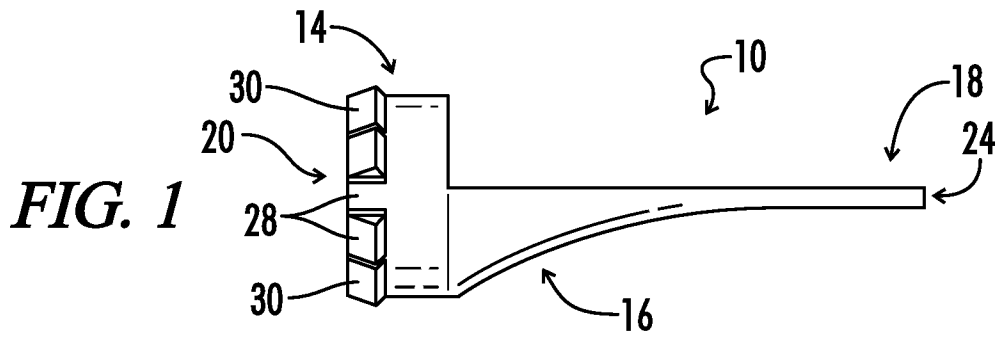
**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

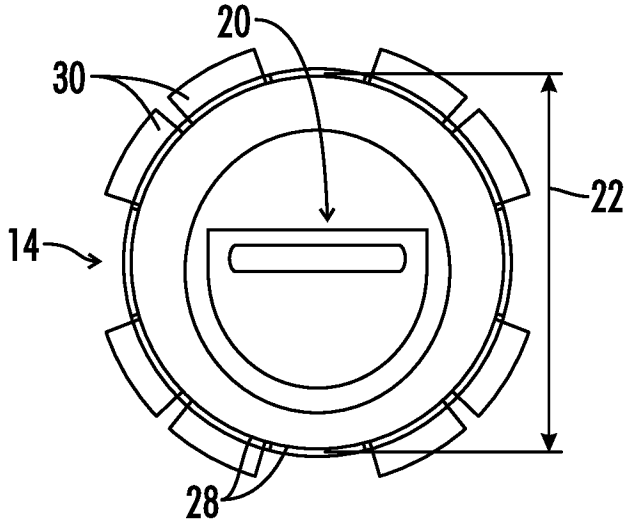
**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

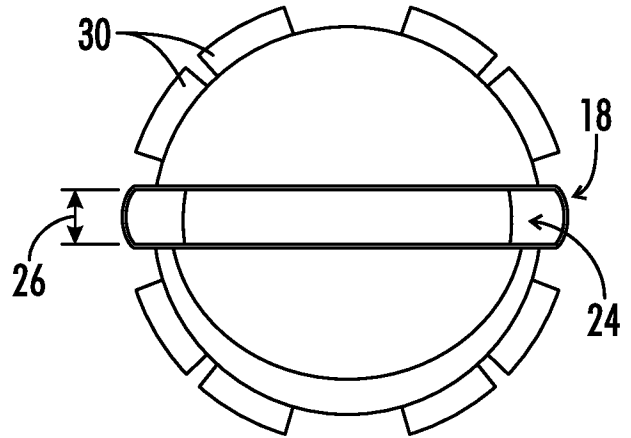
**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**



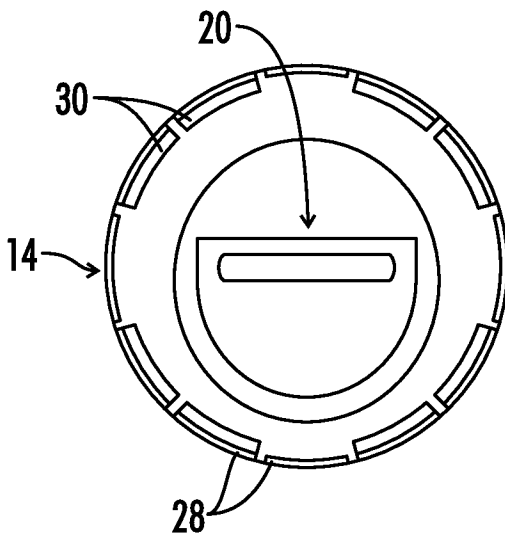
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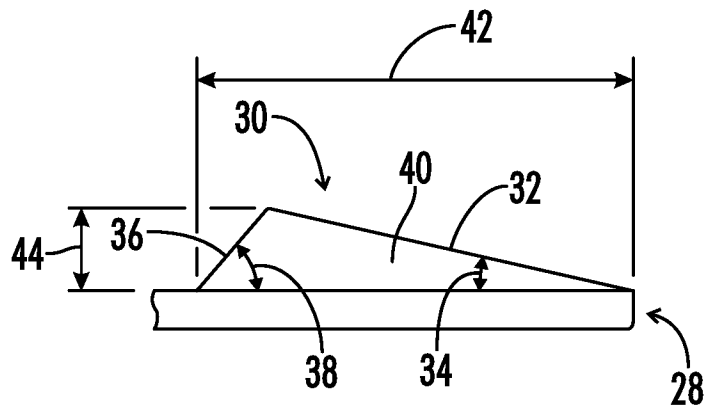
**FIG. 5**



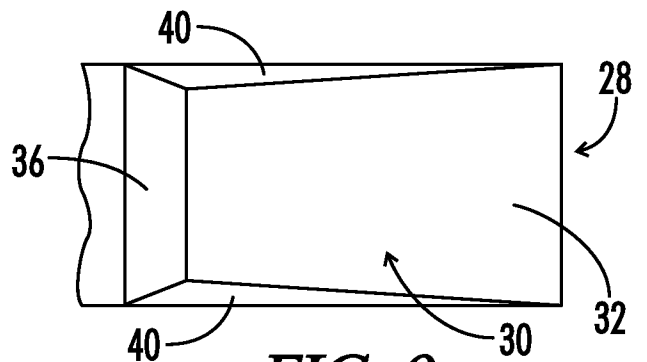
**FIG. 7**



**FIG. 6**



**FIG. 8**

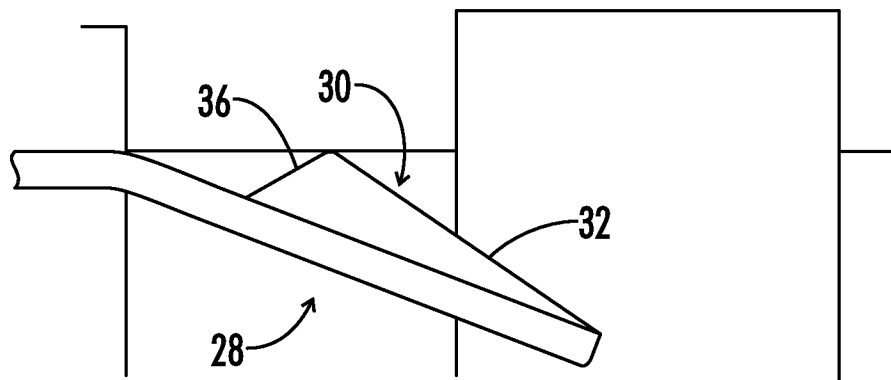


**FIG. 9**

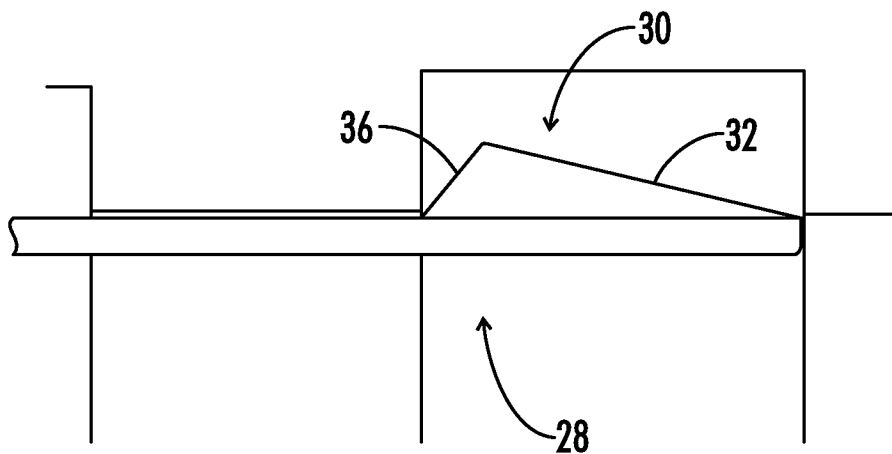
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3/3



*FIG. 10*



*FIG. 11*

+



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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Table with 7 columns: APPLICATION NUMBER, FILING or 371(c) DATE, GRP ART UNIT, FIL FEE REC'D, ATTY. DOCKET NO, TOT CLAIMS, IND CLAIMS. Row 1: 12/620,327, 11/17/2009, 3751, 462, 002627, 20, 3

CONFIRMATION NO. 1359

23456
WADDEY & PATTERSON, P.C.
1600 DIVISION STREET, SUITE 500
NASHVILLE, TN 37203

FILING RECEIPT



Date Mailed: 12/07/2009

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Applicant(s)

Haynes Sloan JR., Gallatin, TN;

Power of Attorney: The patent practitioners associated with Customer Number 23456

Domestic Priority data as claimed by applicant

This application is a CIP of 12/262,621 10/31/2008
which is a CON of 11/561,313 11/17/2006 PAT 7,458,532

Foreign Applications

If Required, Foreign Filing License Granted: 11/30/2009

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US 12/620,327

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No

\*\* SMALL ENTITY \*\*

**Title**

Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe

**Preliminary Class**

004

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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**Title 35, United States Code, Section 184**

**Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as



set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

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**NOT GRANTED**

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Table with 4 columns: APPLICATION NUMBER (12/620,327), FILING OR 371(C) DATE (11/17/2009), FIRST NAMED APPLICANT (Haynes Sloan JR.), ATTY. DOCKET NO./TITLE (002627)

CONFIRMATION NO. 1359

FORMALITIES LETTER

23456
WADDEY & PATTERSON, P.C.
1600 DIVISION STREET, SUITE 500
NASHVILLE, TN 37203



Date Mailed: 12/07/2009

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

An application number and filing date have been accorded to this application. The application is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given TWO MONTHS from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

The required item(s) identified below must be timely submitted to avoid abandonment:

- Replacement drawings in compliance with 37 CFR 1.84 and 37 CFR 1.121(d) are required. The drawings submitted are not acceptable because:
The drawings must be reasonably free from erasures and must be free from alterations, overwriting, interlineations, folds, and copy marks. See Figure(s) All.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

Replies should be mailed to:

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://portal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at <http://www.uspto.gov/ebc>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

/mkanno/

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Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	002627
		Application Number	
Title of Invention	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

**Secrecy Order 37 CFR 5.2**

Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

**Applicant Information:**

<b>Applicant 1</b>					<input type="button" value="Remove"/>
<b>Applicant Authority</b> <input checked="" type="radio"/> Inventor		<input type="radio"/> Legal Representative under 35 U.S.C. 117		<input type="radio"/> Party of Interest under 35 U.S.C. 118	
<b>Prefix</b>	<b>Given Name</b>	<b>Middle Name</b>	<b>Family Name</b>	<b>Suffix</b>	
	W.	Haynes	Sloan	Jr.	
<b>Residence Information (Select One)</b> <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service					
<b>City</b>	Gallatin	<b>State/Province</b>	TN	<b>Country of Residence i</b>	US
<b>Citizenship under 37 CFR 1.41(b) i</b>		US			
<b>Mailing Address of Applicant:</b>					
<b>Address 1</b>	445 Belle Breeze Pl				
<b>Address 2</b>					
<b>City</b>	Gallatin	<b>State/Province</b>	TN		
<b>Postal Code</b>	37066-4685	<b>Country i</b>	US		
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button.					<input type="button" value="Add"/>

**Correspondence Information:**

Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a).			
<input type="checkbox"/> An Address is being provided for the correspondence information of this application.			
<b>Customer Number</b>	23456		
<b>Email Address</b>	pew@iplawgroup.com	<input type="button" value="Add Email"/>	<input type="button" value="Remove Email"/>

**Application Information:**

<b>Title of the Invention</b>	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe		
<b>Attorney Docket Number</b>	002627	<b>Small Entity Status Claimed</b>	<input checked="" type="checkbox"/>
<b>Application Type</b>	Nonprovisional		
<b>Subject Matter</b>	Utility		
<b>Suggested Class (if any)</b>		<b>Sub Class (if any)</b>	
<b>Suggested Technology Center (if any)</b>			
<b>Total Number of Drawing Sheets (if any)</b>	10	<b>Suggested Figure for Publication (if any)</b>	

<b>Application Data Sheet 37 CFR 1.76</b>	Attorney Docket Number	002627
	Application Number	
Title of Invention	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe	

**Publication Information:**

<input type="checkbox"/>	Request Early Publication (Fee required at time of Request 37 CFR 1.219)
<input checked="" type="checkbox"/>	<b>Request Not to Publish.</b> I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application <b>has not and will not</b> be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

**Representative Information:**

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Enter either Customer Number or complete the Representative Name section below. If both sections are completed the Customer Number will be used for the Representative Information during processing.			
Please Select One:	<input checked="" type="radio"/> Customer Number	<input type="radio"/> US Patent Practitioner	<input type="radio"/> Limited Recognition (37 CFR 11.9)
Customer Number	23456		

**Domestic Benefit/National Stage Information:**

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.					
Prior Application Status	Pending		<input type="button" value="Remove"/>		
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
	Continuation in part of	12262621	2008-10-31		
Prior Application Status	Patented		<input type="button" value="Remove"/>		
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
12262621	Continuation of	11561313	2006-11-17	7458532	2008-12-02
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the <b>Add</b> button.					<input type="button" value="Add"/>

**Foreign Priority Information:**

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).			
			<input type="button" value="Remove"/>
Application Number	Country <sup>i</sup>	Parent Filing Date (YYYY-MM-DD)	Priority Claimed
			<input checked="" type="radio"/> Yes <input type="radio"/> No
Additional Foreign Priority Data may be generated within this form by selecting the <b>Add</b> button.			<input type="button" value="Add"/>

<b>Application Data Sheet 37 CFR 1.76</b>	Attorney Docket Number	002627
	Application Number	
Title of Invention	Low Profile Attachment For Emitting Water With Connector For Corrugated Pipe	

**Assignee Information:**

Providing this information in the application data sheet does not substitute for compliance with any requirement of part 3 of Title 37 of the CFR to have an assignment recorded in the Office.				
<b>Assignee 1</b>				<input type="button" value="Remove"/>
If the Assignee is an Organization check here. <input type="checkbox"/>				
Prefix	Given Name	Middle Name	Family Name	Suffix
<b>Mailing Address Information:</b>				
Address 1				
Address 2				
City		State/Province		
Country i		Postal Code		
Phone Number		Fax Number		
Email Address				
Additional Assignee Data may be generated within this form by selecting the Add button.				<input type="button" value="Add"/>

**Signature:**

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.					
<b>Signature</b>	/Phillip E. Walker, 52,336/			Date (YYYY-MM-DD)	2009-11-17
First Name	Phillip E.	Last Name	Walker	Registration Number	52336

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

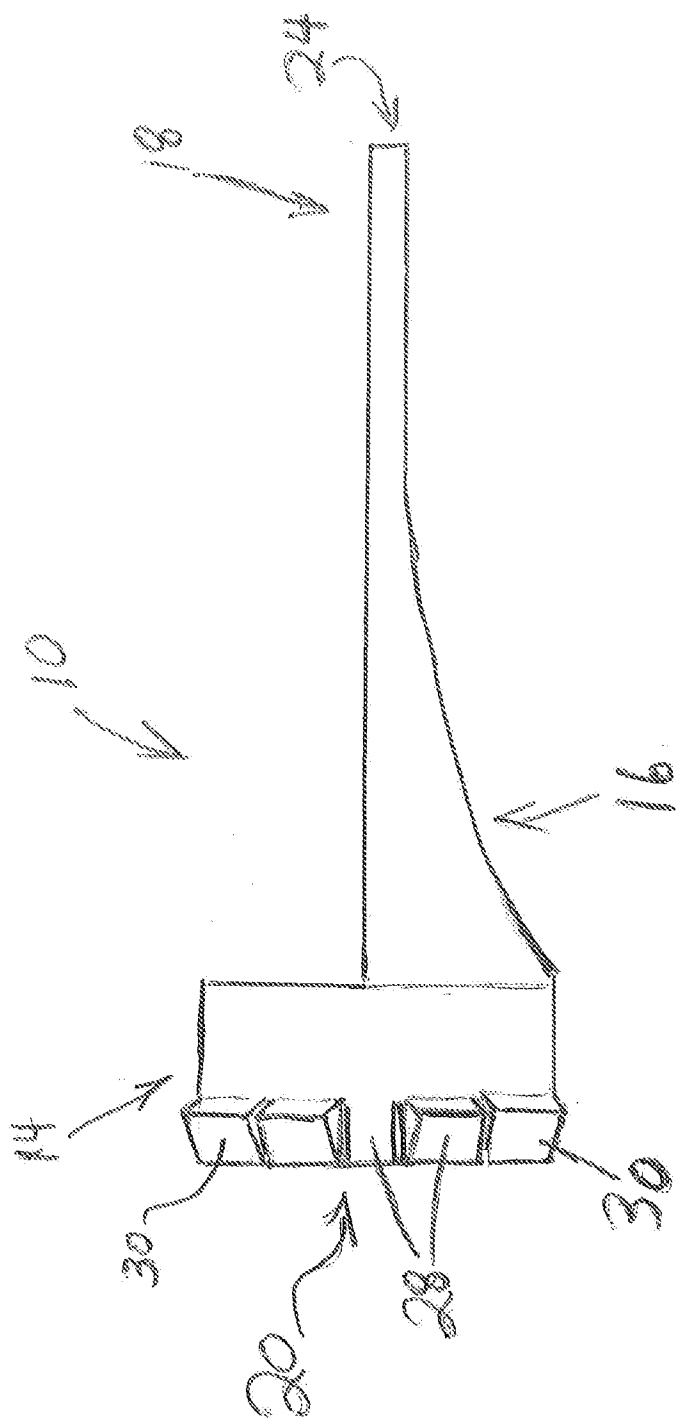


Fig. 1



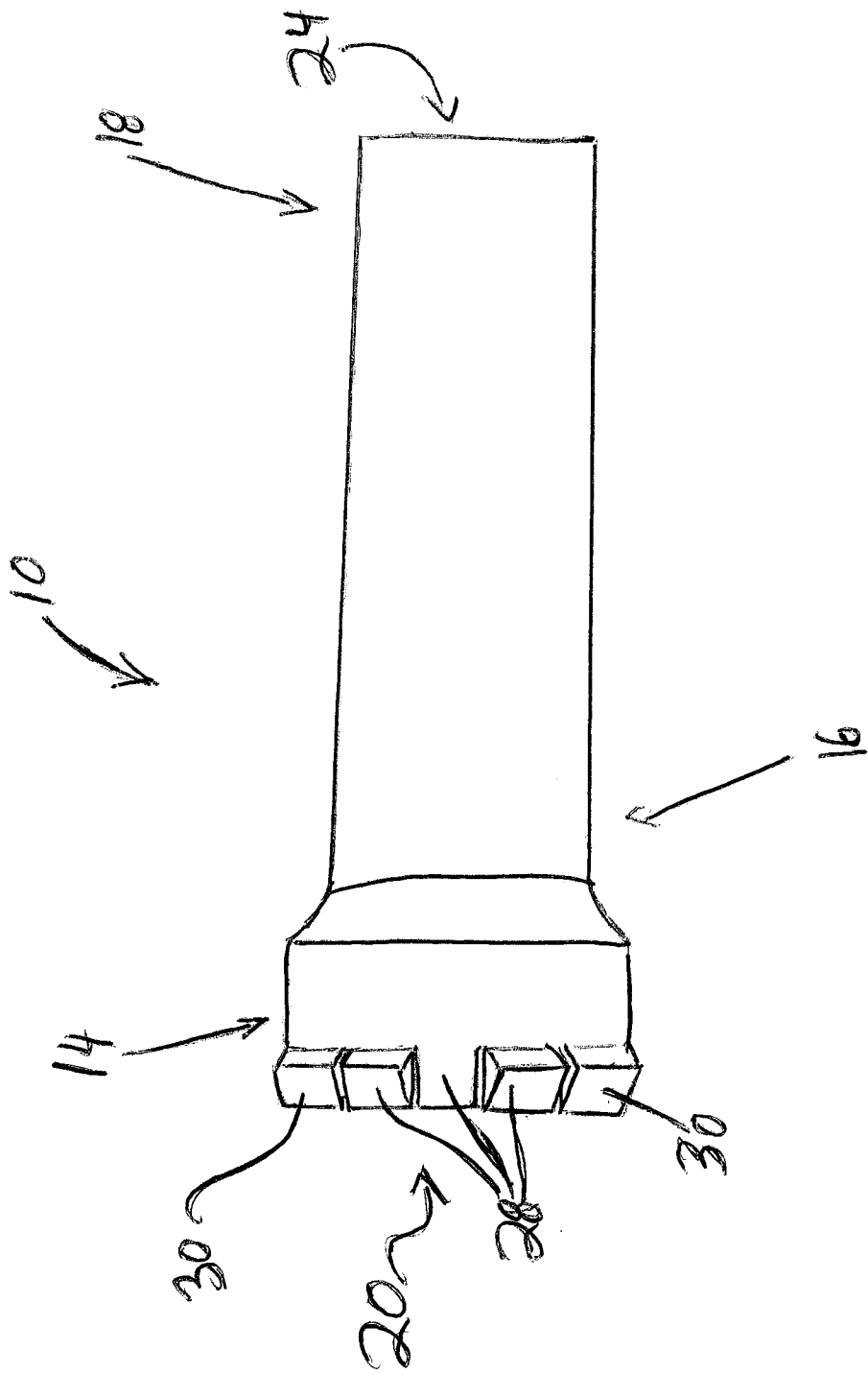


Fig. 2

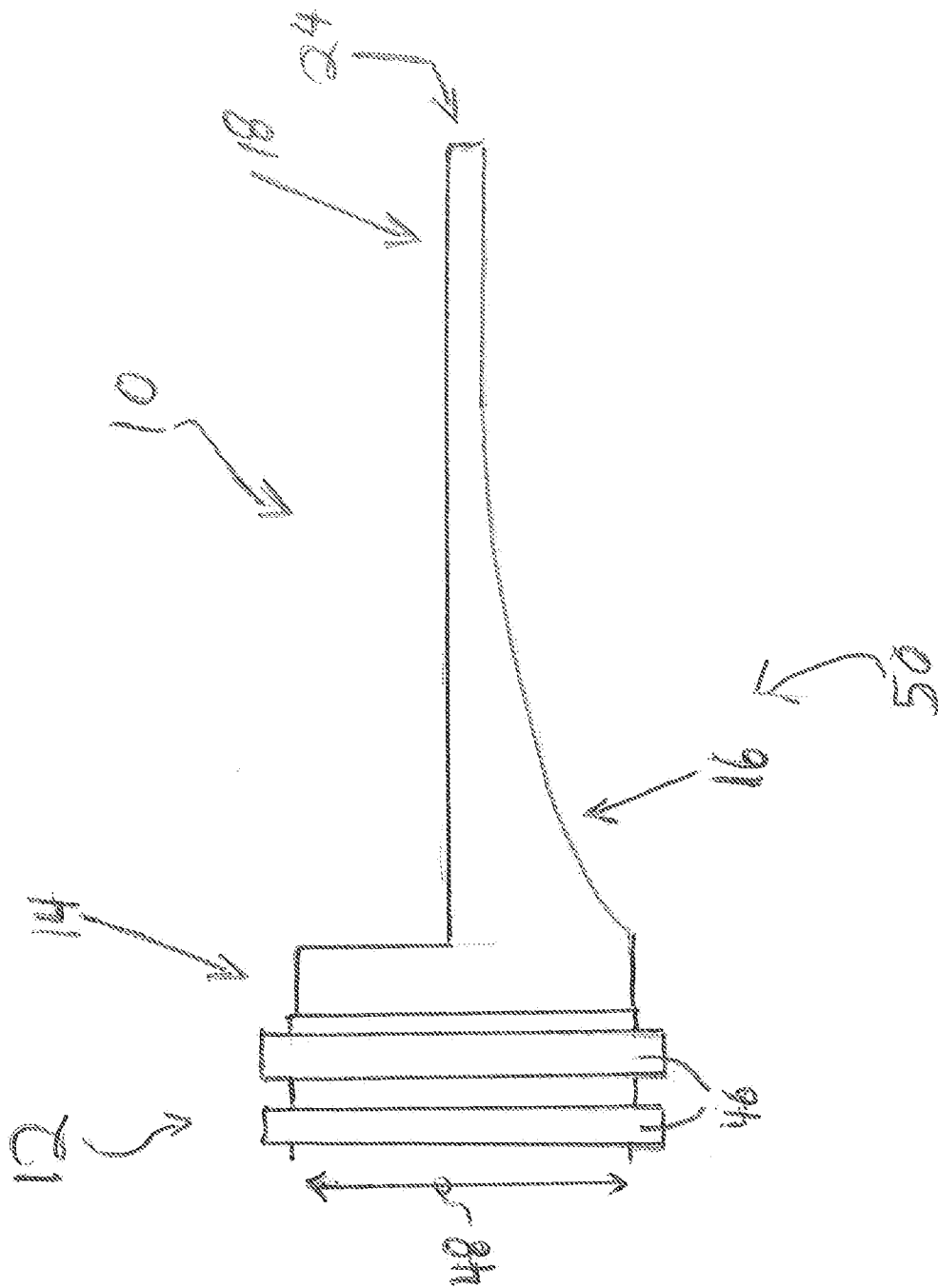


Fig. 3

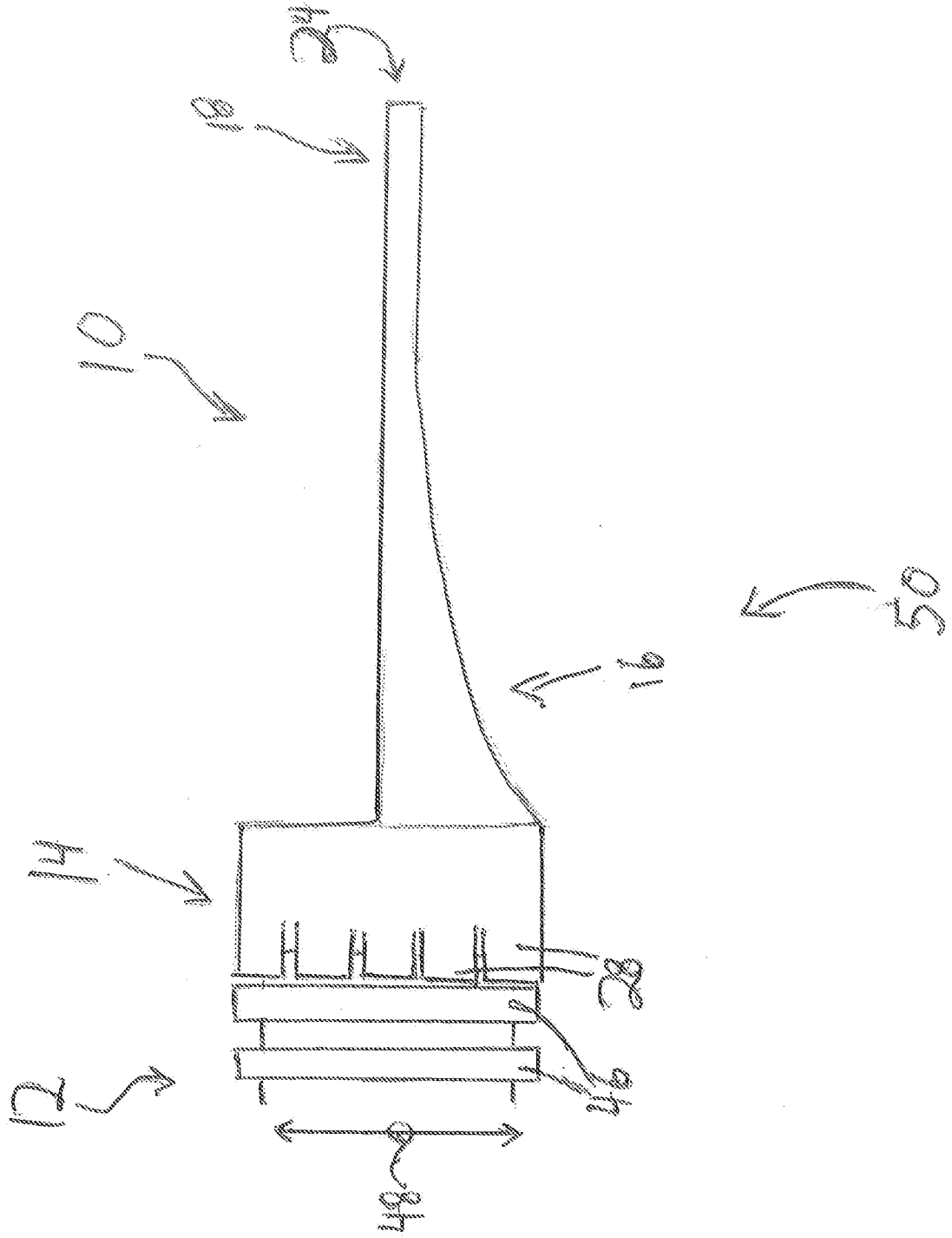


Fig. 4

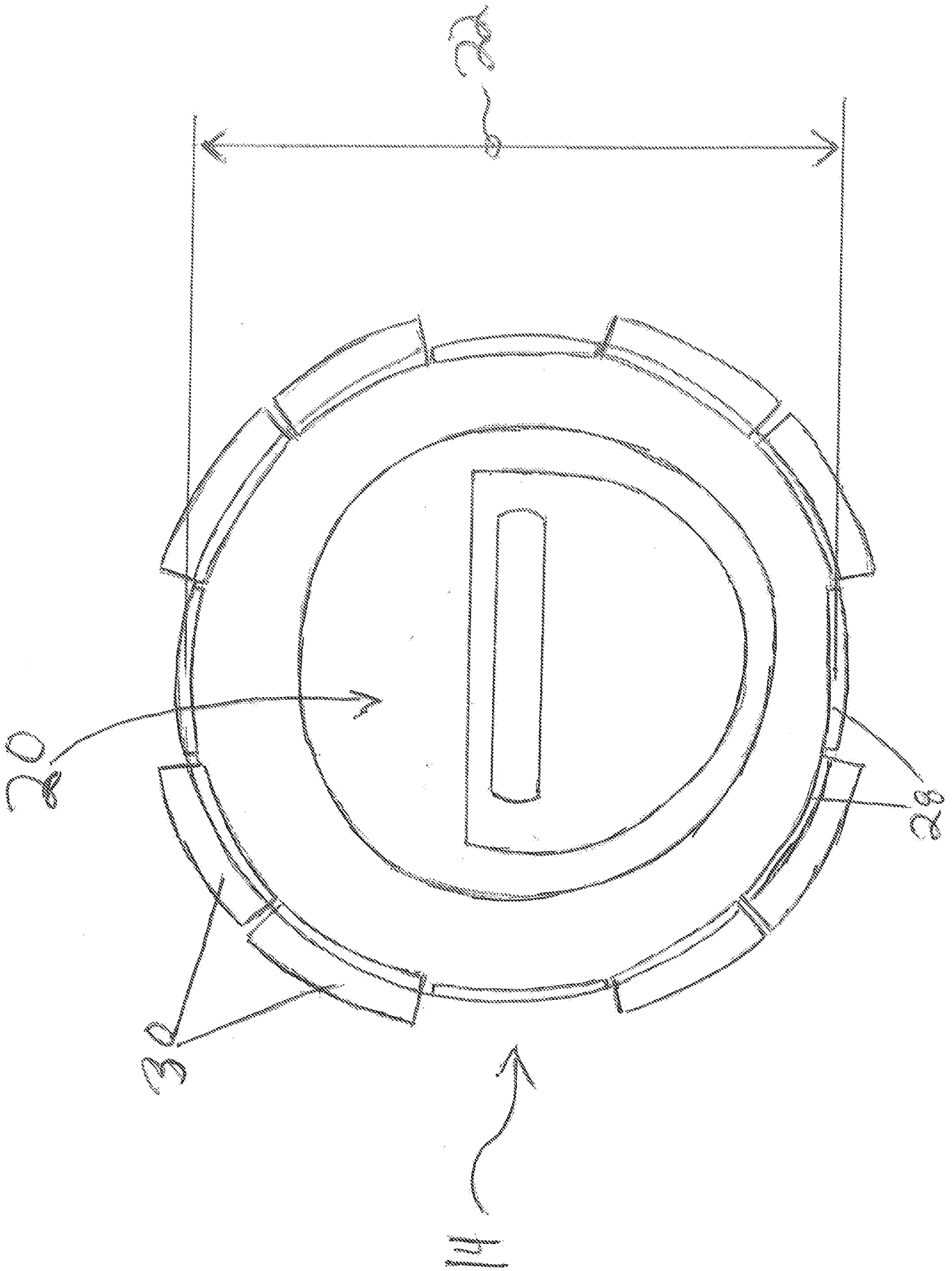


Fig 5

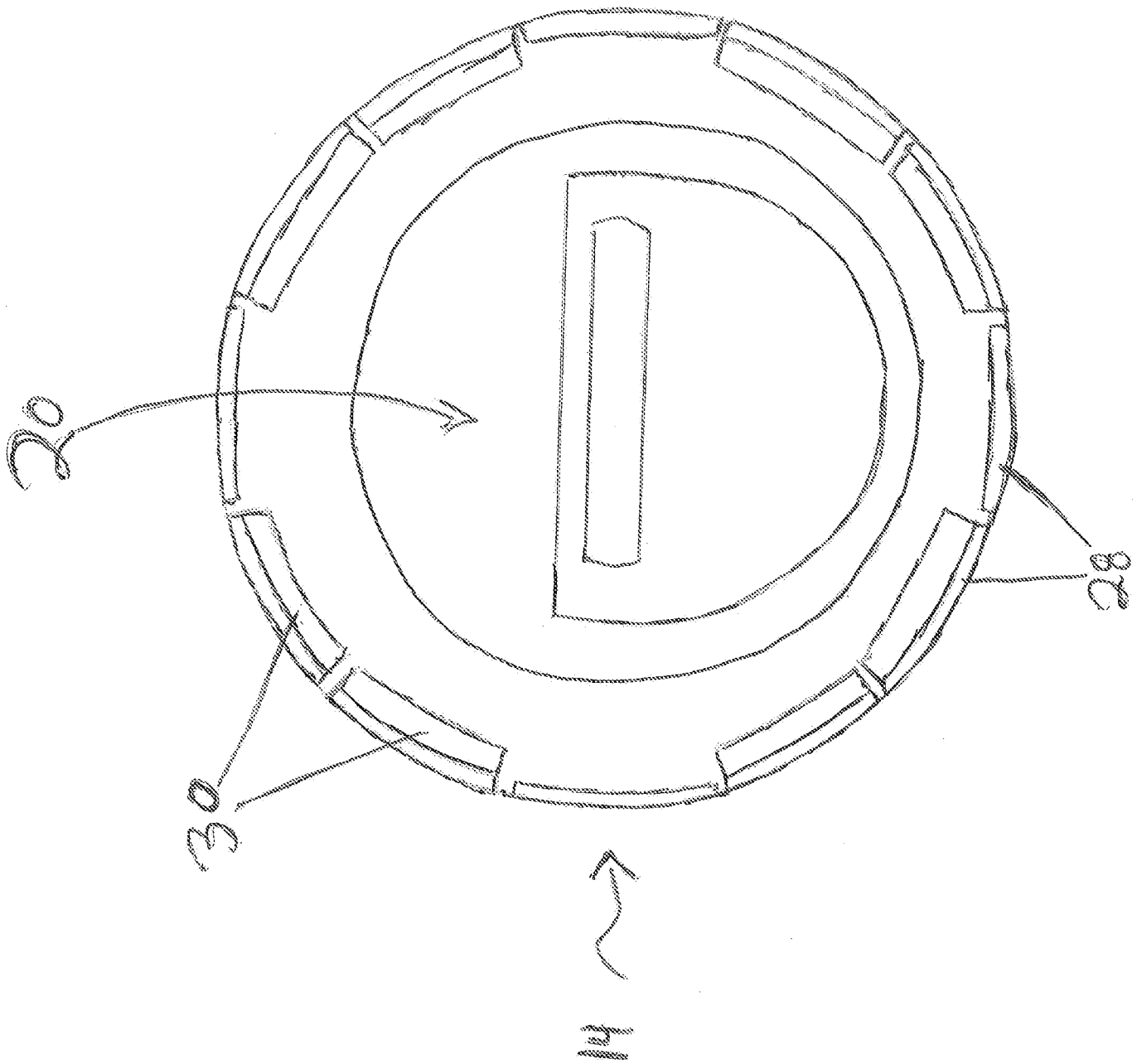


Fig 6

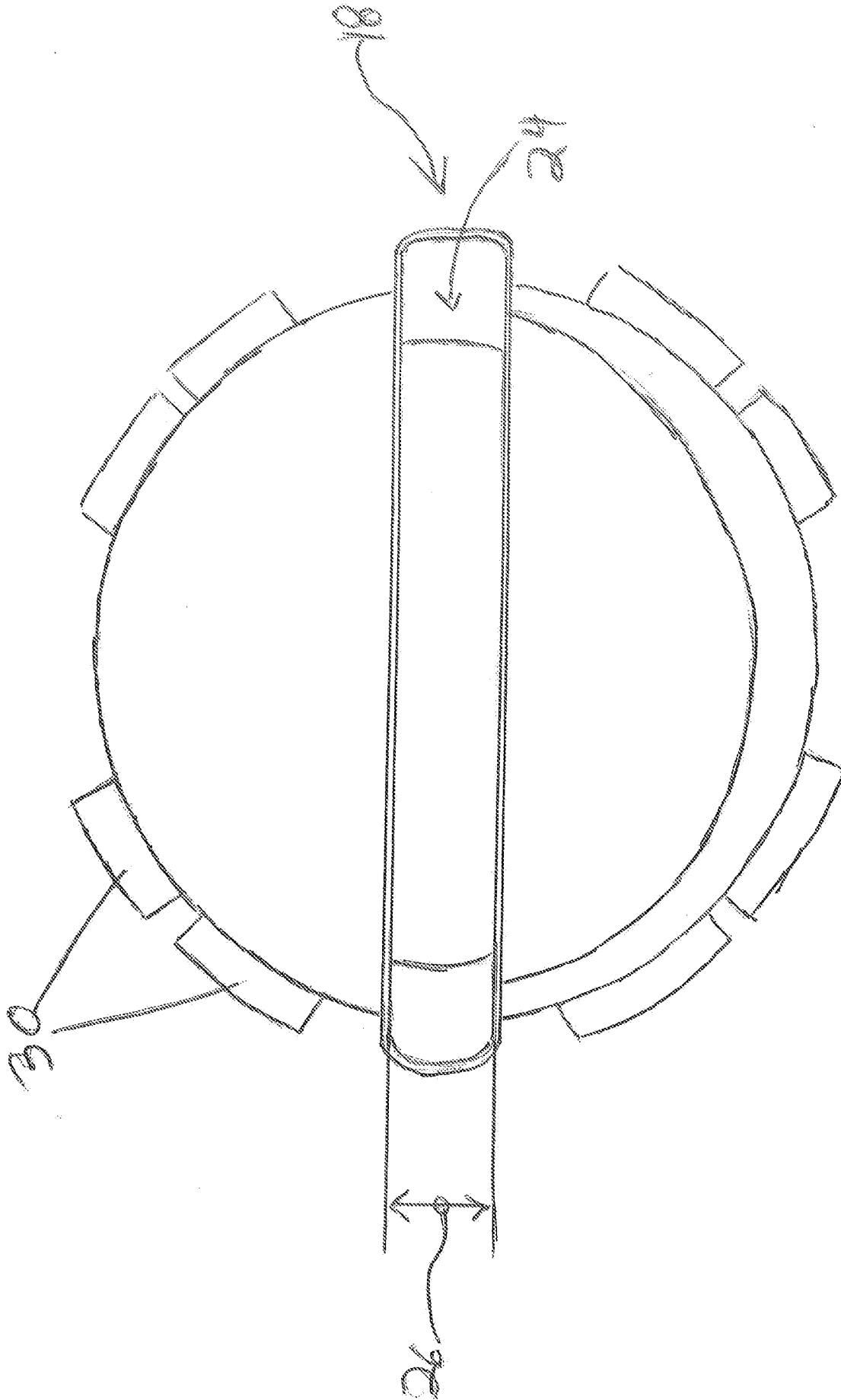
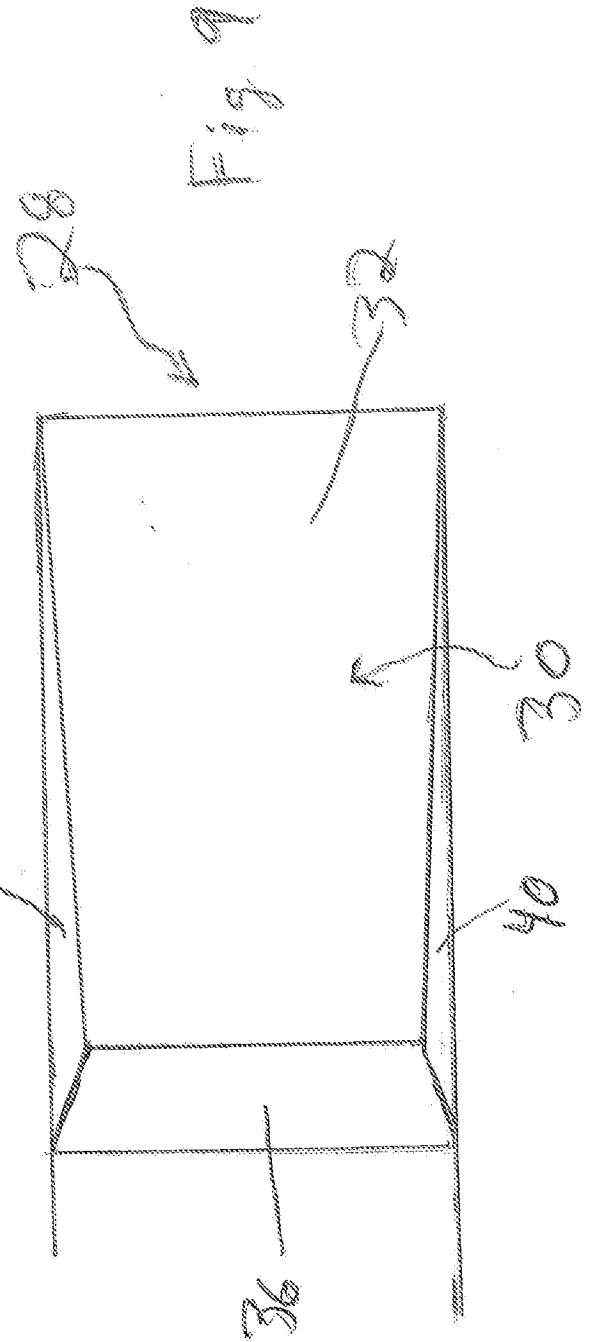
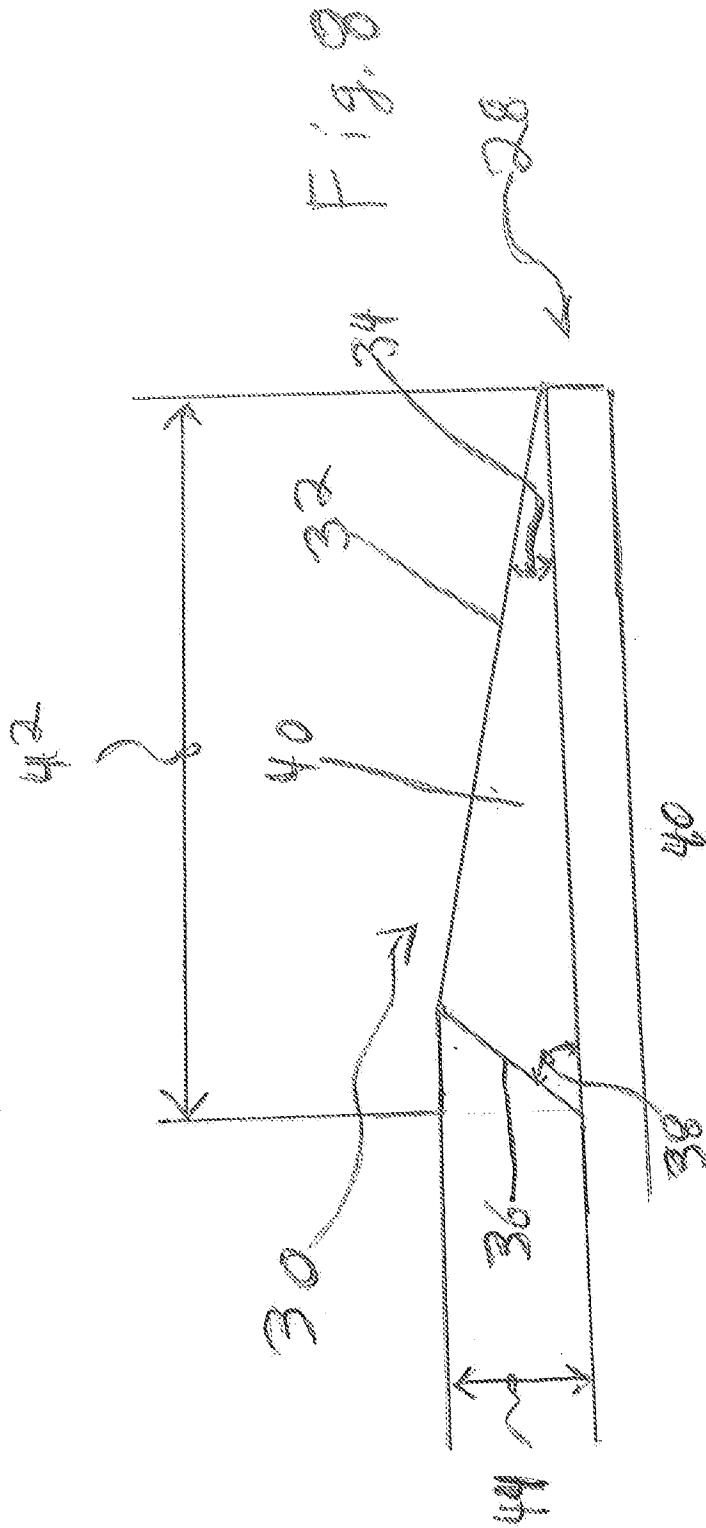


Fig. 7



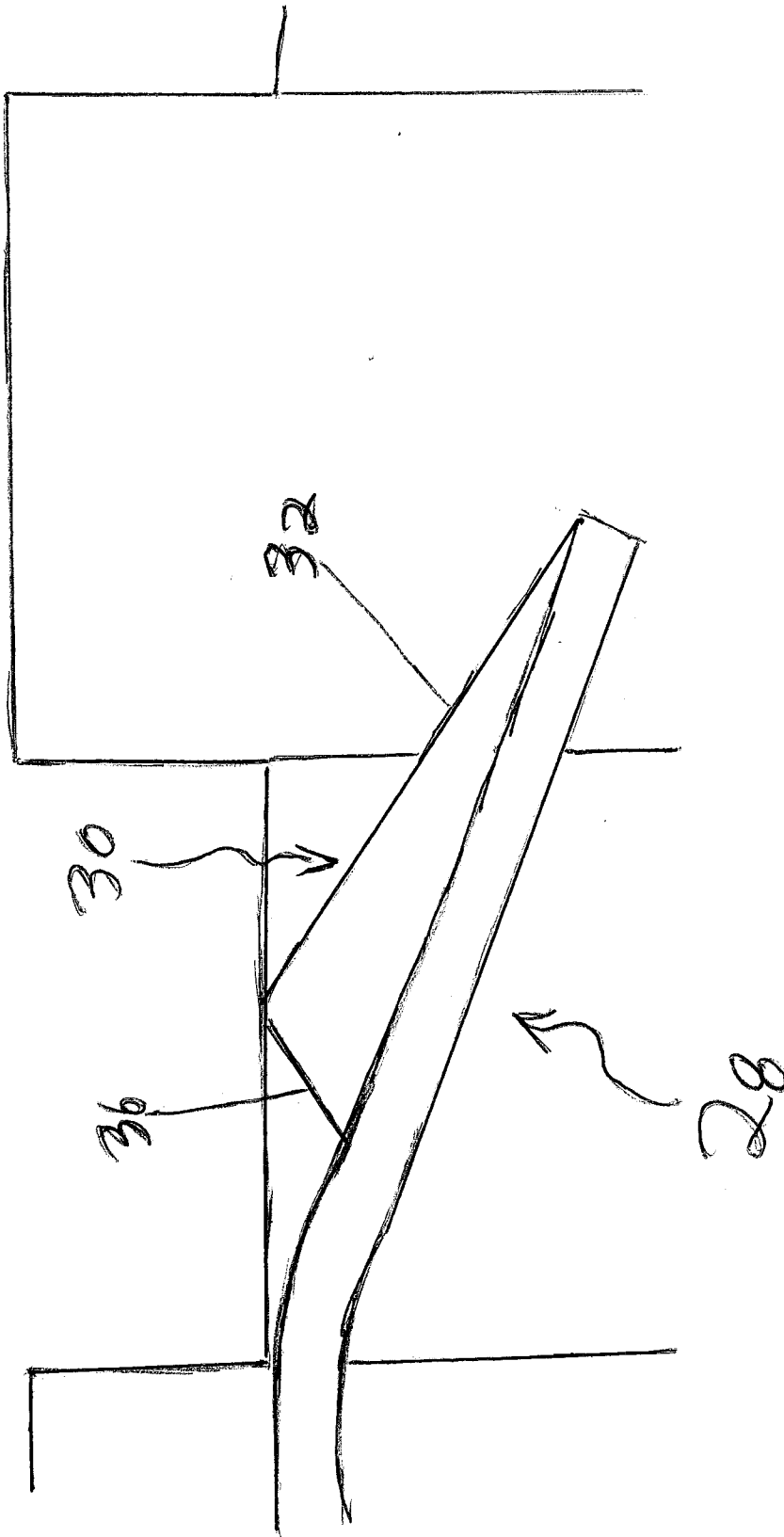


Fig 10



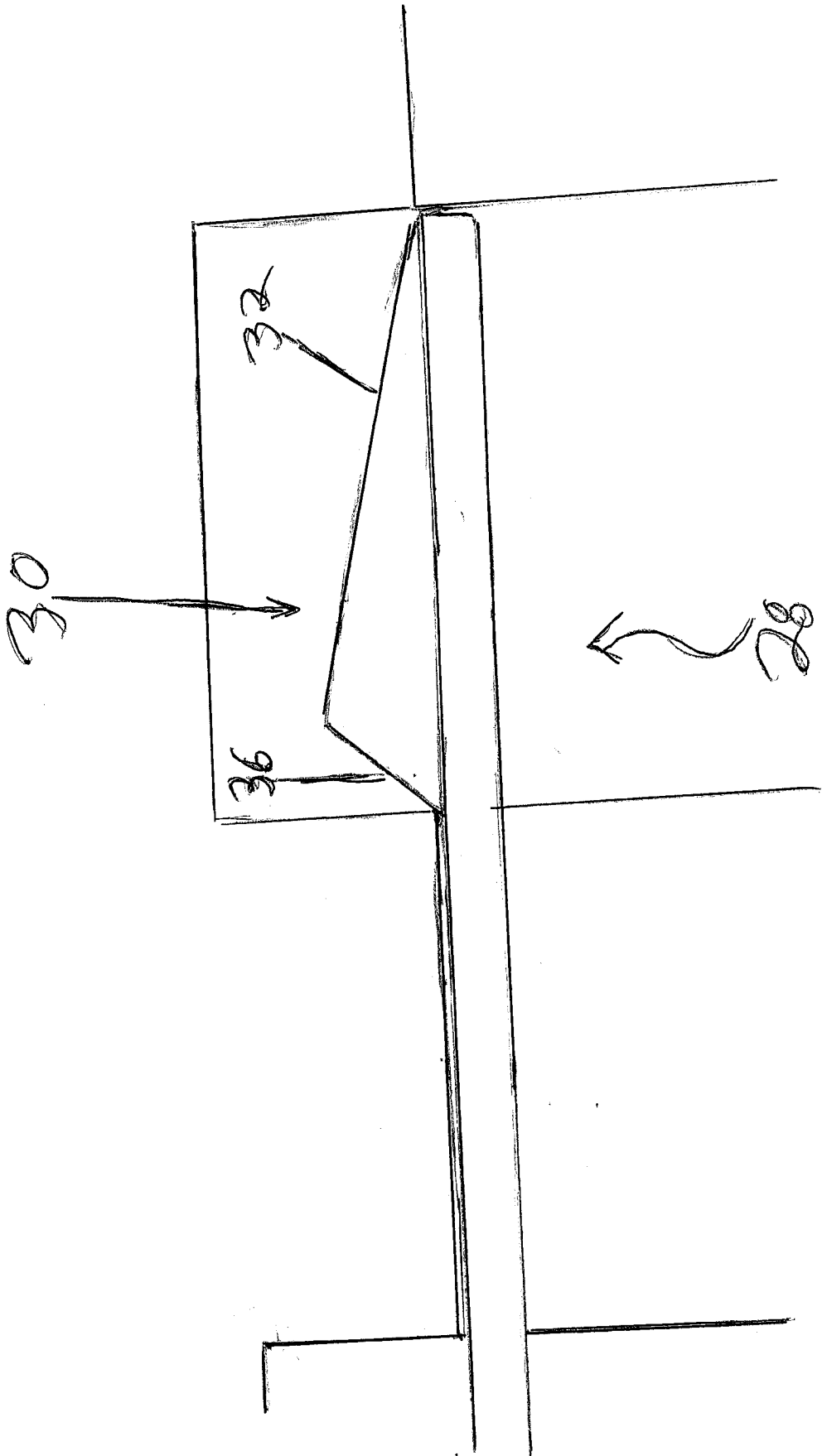


Fig. 11

## DECLARATION AND POWER OF ATTORNEY

I hereby declare that: (1) Each inventor's residence, mailing address, and citizenship are as stated below next to their name; and (2) I believe the inventor named below to be the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE

the application of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part applications.

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or (f) or 365(b) of any foreign application(s) for patent, or inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent, or inventor's or plant

breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed: None

I hereby claim priority benefits under 35 U.S.C. §119(e) of any United States Provisional application(s) listed below: None

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) listed below:

U.S. Patent Application Serial No. 12/262,621 filed October 31, 2008 entitled "Low Profile Attachment For Emitting Water."

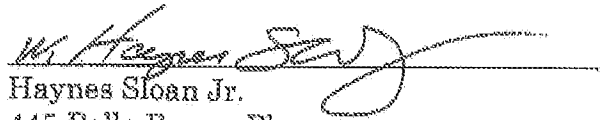
U.S. Patent Application Serial No. 11/561,313 filed November 17, 2006 entitled "Low Profile Drain Pipe Emitter," now U.S. Patent No. 7,458,532 issued December 2, 2008.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the practitioners associated with Customer Number **23456** as my attorneys to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please direct correspondence and telephone calls to Phillip E. Walker at the address and telephone number associated with the Customer Number.

Inventor's signature:

  
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11-11-09  
\_\_\_\_\_

Date

Citizenship:

United States

Post Office Address:

445 Belle Breeze Pl.  
Gallatin, TN 37066-4685

## **LOW PROFILE ATTACHMENT FOR EMITTING WATER WITH CONNECTOR FOR CORRUGATED PIPE**

### **CROSS-REFERENCES TO RELATED APPLICATIONS**

**[0001]** This application is a continuation-in-part application which claims benefit of U.S. Patent Application Serial No. 12/262,621 filed October 31, 2008 entitled “Low Profile Attachment For Emitting Water” which is a continuation application of U.S. Patent Application Serial No. 11/561,313 filed November 17, 2006 entitled “Low Profile Drain Pipe Emitter”, now U.S. Patent No. 7,458,532 issued December 2, 2008, both of which are hereby incorporated by reference:

### **BACKGROUND OF THE INVENTION**

#### **1. Field of the Invention**

**[0002]** The present invention relates generally to an attachment for emitting water from a water source, and more specifically, but not by way of limitation, to a drain pipe attachment that has a low profile design to emit water from a pipe or downspout.

#### **2. Background of the Invention**

**[0003]** Numerous prior art attachment designs exist to direct water flowing from pipes and downspouts on buildings. These prior art designs have attempted to manipulate the outflow of water from the pipes and downspouts in order to increase the flow efficiency of the water or transfer the water to a different location.

**[0004]** However, almost all of the prior art patents fail to adequately provide an apparatus which properly disperses the water away from the downspout or pipe and maintains the water dispersing apparatus in such a manner to keep the prior art water dispersing apparatus from interfering with operations and maintenance around the water dispersing apparatus. For example, U.S. Patent Nos. 2,814,529, 3,861,419, and 5,358,007, require manual manipulation of the water dispersing apparatus to move these prior art devices out of the way when maintenance or other operations are required around those prior art downspouts or water dispersing devices.

**[0005]** The current invention is an improvement over the old designs in several ways. For example, the inlet end of the current invention facilitates engagement of the water emitting attachment to a corrugated pipe or downspout through inclusion of projections mounted on resilient fingers spaced around the inlet end of the current invention. Also, the outlet end of the current invention is an improvement over these prior art devices through the improved water emitting design that increases the fluid dynamic flow out of the outlet end of the current invention thereby reducing erosion around the outlet end of the current invention.

**[0006]** Thus, there is a need in the art for a low profile attachment which easily and securely attaches to corrugated pipes or downspouts.

### **BRIEF SUMMARY OF THE INVENTION**

**[0007]** The present invention provides an attachment for emitting water from a water source. The attachment comprises an inlet end, transitional section

connected to the inlet end, and an outlet end connected to the transitional section opposite from the inlet end. The inlet end includes an intake opening and the outlet end includes a dispersion opening. The intake opening has an inlet height and the dispersion opening has an outlet height, the outlet height being less than the inlet height. The inlet end also includes a plurality of resilient fingers where two or more of the fingers include a lateral projection. The resilient fingers and lateral projections of the inlet end are provided to engage the ribs of a corrugated pipe for removably securing the attachment to the corrugated pipe.

**[0008]** The invention is designed to lower the exit height of drain pipes and downspouts. The invention provides a less obtrusive exit from the pipe or downspout. This lowered exit area facilitates maintenance around the exit area of the pipe or downspout and reduces erosion of the surrounding surface near the exit of the water source to which the invention is attached.

**[0009]** The invention has numerous uses in water dispersion areas. For example, the invention can be utilized in such areas as over the top of curbs, into boundary swells, from landscaping beds onto the lawn, onto the tops of sidewalks and driveways, in flat elevations, and in sloping grades.

**[0010]** In one embodiment, this invention is designed to have an outlet end height that is approximately 75 percent lower than the exit height of other conventional drain pipe/downspout attachments. However, the current invention still allows a smooth flow of water out of the dispersion, or exit, opening without increasing the effective erosion on the ground surrounding the exit opening.

**[0011]** When placed in a manner such that the outlet end of the attachment extends out into a yard or landscape area, maintenance and lawn care around the outlet end is easily accomplished due to the fact that a mower can mow over the outlet end without damaging the mower or the invention.

**[0012]** Accordingly, it is an object of the present invention to provide an improved attachment for emitting water from a water source.

**[0013]** Another object of the present invention is to provide a water emitting attachment that has an outlet opening that is shorter in height than the height of the inlet opening.

**[0014]** Another object of the present invention is to provide a water emitting attachment that has an outlet opening that has a low profile exit height.

**[0015]** Another object of the present invention is to provide a water emitting attachment that has an outlet opening that facilitates maintenance around the exit of the attachment without the need for repositioning the attachment.

**[0016]** Yet another object of the present invention is to provide a water emitting attachment adapted to direct water from a pipe or downspout.

**[0017]** Still yet another object of the present invention is to provide an attachment for emitting water that can easily be secured to a corrugated pipe or downspout.

**[0018]** Numerous other objects, features, and advantages of the present invention will be readily apparent to those skilled in the art, upon a reading of the following disclosure, when taken in conjunction with the accompanying drawings.



## BRIEF DESCRIPTION OF THE DRAWINGS

[0019] Fig. 1 is a side view of an embodiment of a water emitting apparatus.

[0020] Fig. 2 is a top view of the embodiment of Fig. 1.

[0021] Fig. 3 is a side view of the embodiment of Fig. 1 as attached to a corrugated pipe. Fig. 3 shows an embodiment in which the lateral projections of the inlet end extend radially outward and engage the ribs of the corrugated pipe from the inside.

[0022] Fig. 4 is a side view of another embodiment as attached to a corrugated pipe. Fig. 4 shows an embodiment in which the lateral projections of the inlet end extend radially inward and engage the ribs of the corrugated pipe from the outside.

[0023] Fig. 5 is an end view of the inlet end of the embodiment of Fig. 1.

[0024] Fig. 6 is an end view of the inlet end of the embodiment of Fig. 4.

[0025] Fig. 7 is an end view of the outlet end of the embodiment of Fig. 1.

[0026] Fig. 8 is a side view of a resilient finger and lateral projection of the embodiment of Fig. 1.

[0027] Fig. 9 is a top view of the resilient finger and lateral projection of Fig. 8.

[0028] Fig. 10 is a cross-sectional view of a length of corrugated pipe showing the resilient finger and lateral projection of Fig. 8 as the water emitting apparatus is being attached to the corrugated pipe.

[0029] Fig. 11 is a cross-sectional view similar to Fig. 10, after the water emitting apparatus is in place within the corrugated pipe.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

**[0030]** Referring now to the drawings, and particularly to Fig. 1, an attachment for emitting water is shown and generally designated by the numeral 10. The attachment 10 can also be described as a low profile exit emitter 10, a drain pipe attachment 10, or a downspout attachment 10. The attachment 10 for emitting water from a water source 12 comprises an inlet end 14, a transitional section 16 connected to the inlet end 14, and an outlet end 18 connected to the transitional section 16 opposite from the inlet end 14. The transitional section 16 provides a geometric transition from the inlet end 14 to the outlet end 18. The inlet end 14 of the attachment 10 accepts water from the water source 12 and allows that water to pass through the transitional section 16 and to the outlet end 18 where the water exits the attachment 10.

**[0031]** With reference to Fig. 5, the inlet end 14 includes an intake opening 20 having an inlet height 22. Similarly, with reference to Fig. 7, the outlet end 18 includes a dispersion opening 24 having an outlet height 26, the outlet height 26 being less than the inlet height 22. The inlet end 14 further includes a plurality of resilient fingers 28, two or more of the fingers 28 including a lateral projection 30.

**[0032]** It is not necessary that every resilient finger 28 have a lateral projection 30. In the embodiment shown in Fig. 5, by way of example, two fingers 28 with projections 30 are alternated with one finger 28 without a projection 30.

**[0033]** In one embodiment, each of the projections 30 includes a first surface 32 making a first angle of incline 34 to the resilient finger 28. In this embodiment each projection 30 will also include a second surface 36 making a second angle of

incline 38 to the resilient finger 28. In this embodiment, the first surface 32 is farther from the outlet end 18 than the second surface 36, and the first angle of incline 34 is less than the second angle of incline 38.

**[0034]** As best illustrated by Fig. 8, the first surface 32 and the second surface 36 join so that the shape of the projections 30 is generally a triangular prism having two triangular faces 40. The shape of the projections 30 will only generally be that of a triangular prism. In any real embodiment the shape will not and need not be perfect. Thus, due to manufacturing defects or the need to interface the shape of the projections 30 with that of the resilient fingers 28 or that of the inlet end 14, the edges or surfaces may be curved and the vertices or angles may be blunted and not perfectly sharp. Similarly, that the faces 40 are described as triangular should not imply that their shape will be that of a perfect triangle.

**[0035]** The triangular faces 40 of this embodiment can be described as having a base length 42 and a projection height 44. In a preferred embodiment, the base length 42 will be between about one half of an inch and about two inches. Similarly, the projection height 44 will be between about one eighth of an inch and about three eighths of an inch. These dimensions provide an effective interface with the most common types of corrugated pipes or down spouts.

**[0036]** One skilled in the art will note that the triangular shape of the projections 30 is not essential for the function of the invention and that other shapes might be used. Nonetheless, such other shapes could similarly be described by a base length 42 and a projection height 44. In such other embodiments, it may still be advantageous to provide a base length 42 between about one half of an inch

and about two inches and a projection height 44 between about one eighth of an inch and about three eighths of an inch.

**[0037]** Fig. 5 illustrates the embodiment of Figs. 1-3 wherein the projections 30 extend radially outward. Similarly, Fig. 6 illustrates the embodiment of Fig. 4 wherein the projections 30 extend radially inward. In one embodiment, for attaching to the most common varieties of corrugated drain pipe, the intake opening 20 will have a generally circular shape. Of course, the shape will be only generally and not perfectly circular.

**[0038]** For providing a low profile attachment 10, an embodiment of the present invention may have an inlet height 22 that is at least twice as large as the outlet height 26. Similarly, the outlet height 26 may be made less than about two inches.

**[0039]** Although one skilled in the art will note that the resilient fingers 28 may be arranged in a variety of ways around the inlet end 14, in one embodiment, best illustrated in Fig. 1, the resilient fingers 28 are spaced around the intake opening 20 and extend longitudinally from the intake opening 20.

**[0040]** In many applications, the water source 12 will be a length of corrugated pipe including longitudinally spaced, circumferentially extending ribs 46. In some corrugated pipes 12, the longitudinally spaced, circumferentially extending ribs 46 may be arranged spirally, while in other pipes the ribs 46 may be arranged annularly. The pipe may be described as having a conduit height 48. In such applications, the attachment 10, which may also be described as an emitter 10,

may be combined with a length of corrugated pipe 12 to form a low profile water emitter assembly 50.

**[0041]** In one embodiment of such an emitter assembly 50, as best illustrated in Fig. 3, the inlet end 14 of the emitter 10 will have projections 30 which extend radially outward. In such an embodiment, the emitter 10 will be inserted into the length of corrugated pipe 12 such that the projections 30 engage the ribs 46 of the corrugated pipe 12 from the inside. An alternative embodiment of the emitter assembly 50 is shown in Fig. 4, where the projections 30 of the inlet end 14 of the emitter 10 project radially inward. In this embodiment, the emitter 10 will be positioned over and around the corrugated pipe 12 such that the projections 30 engage the ribs 46 of the corrugated pipe 12 from the outside.

**[0042]** Figs. 10 and 11 best illustrate the action of the resilient fingers 28 and the projections 30 as the inlet end 14 of the attachment 10 or emitter 10 is inserted into the water source 12 or corrugated pipe 12. As illustrated in Fig. 10, the resilient fingers 28 will be deflected as the inlet end 14 of the emitter 10 is inserted into the water source 12. Fig. 11 shows the state of the resilient finger 28 once the inlet end 14 has been inserted into the water source 12 securing the attachment 10 to the water source 12.

**[0043]** As can be appreciated from Fig. 11, the lesser angle of incline 34 allows the first surface 32 to have a gentler slope than that of the second surface 36. This relationship between the slopes of the surfaces of the projection 30 in the preferred embodiment makes it easier to insert the attachment 10 into the water source 12 than to remove it. Thus the preferred embodiment allows a connection between the

attachment 10 and the water source 12 that is at the same time easy to install and yet a secure connection.

**[0044]** The attachment 10 is used in a gravity flow, surface drainage system and is designed to attach to a water source 12 that is a four-inch-diameter corrugated pipe. The attachment 10 can also be designed by one skilled in the art to attach to other drain pipes or downspouts while still maintaining its inventive spirit.

**[0045]** The attachment 10 is preferably made of polymers, but can be made of metal, ceramic, polyvinylchloride, or other comparable materials.

**[0046]** In one embodiment, the overall length of the emitter 10 is 15-7/8 inches. The outlet end 18 has a curved rectangular shape and measures 3/4 inch tall by 3 inches wide. The inlet end 14 has a generally circular shape and has a diameter of 4-1/2 inches.

**[0047]** Thus, it is seen that the apparatus of the present invention readily achieves the ends and advantages mentioned as well as those inherent therein. While certain preferred embodiments of the invention have been illustrated and described for purposes of the present disclosure, numerous changes in the arrangement and construction of parts may be made by those skilled in the art, which changes are encompassed within the scope and spirit of the present invention as defined by the appended claims.

## CLAIMS

What is claimed is:

1. An attachment for emitting water from a water source, comprising:  
an inlet end including an intake opening having an inlet height and a plurality of resilient fingers, two or more of the fingers including a lateral projection;  
a transitional section connected to the inlet end; and  
an outlet end connected to the transitional section opposite from the inlet end, the outlet end including a dispersion opening having an outlet height, the outlet height being less than the inlet height.
2. The attachment of claim 1, wherein each of the projections includes a first surface making a first angle of incline to the resilient finger, and a second surface making a second angle of incline to the resilient finger, the first surface being farther from the outlet end than the second surface is, and the first angle of incline being less than the second angle of incline.
3. The attachment of claim 2, wherein the first surface and the second surface of the projections join so that the shape of each projection is generally a triangular prism having two triangular faces, each triangular face having a base length and a projection height, the base

length being between about one-half inch and about two inches, and the projection height being between about one-eighth inch and about three-eighths inch.

4. The attachment of claim 1, wherein the projections extend radially outward.
5. The attachment of claim 1, wherein the projections extend radially inward.
6. The attachment of claim 1, wherein the projections have a base length and a projection height, the base length being between about one-half inch and about two inches, and the projection height being between about one-eighth inch and about three-eighths inch.
7. The attachment of claim 1, wherein the intake opening has a generally circular shape.
8. The attachment of claim 1, wherein the inlet height is at least twice as large as the outlet height.
9. The attachment of claim 1, wherein the outlet height is less than about two inches.



10. An attachment for emitting water from a water source, comprising:  
an inlet end including an intake opening having an inlet height;  
a plurality of resilient fingers spaced around the intake opening and  
extending longitudinally from the intake opening;  
a plurality of projections, each projection attached to one of the  
resilient fingers and extending radially inward;  
a transitional section connected to the inlet end; and  
an outlet end connected to the transitional section opposite the inlet  
end, the outlet end including a dispersion opening having an  
outlet height, the outlet height being less than the inlet height.
11. The attachment of claim 10, wherein each of the projections includes a  
first surface making a first angle of incline to the resilient finger, and a  
second surface making a second angle of incline to the resilient finger,  
the first surface being farther from the outlet end than the second  
surface is, and the first angle of incline being less than the second  
angle of incline.
12. The attachment of claim 11, wherein the first surface and the second  
surface of the projections join so that the shape of each projection is  
generally a triangular prism having two triangular faces, each  
triangular face having a base length and a projection height, the base

length being between about one-half inch and about two inches, and the projection height being between about one-eighth inch and about three-eighths inch.

13. The attachment of claim 10, wherein the intake opening has a generally circular shape.
14. The attachment of claim 10, wherein the inlet height is at least twice as large as the outlet height.
15. The attachment of claim 10, wherein the outlet height is less than about two inches.
16. A low profile water emitter assembly, comprising:
  - a length of corrugated pipe including longitudinally spaced, circumferentially extending ribs, the pipe having a conduit height; and
  - an emitter, the emitter comprising:
    - an inlet end including a plurality of resilient fingers, two or more of the fingers including a projection, each projection engaged with one of the ribs of the pipe for securing the inlet end to the pipe;
    - a transitional section attached to the inlet end; and

an outlet end attached to the transitional section opposite the inlet end, the outlet end including a dispersion opening having an outlet height, the outlet height being less than the conduit height.

17. The assembly of claim 16, wherein each of the projections includes a first surface making a first angle of incline to the resilient finger, and a second surface making a second angle of incline to the resilient finger, the first surface being farther from the outlet end than the second surface is, and the first angle of incline being less than the second angle of incline.
18. The assembly of claim 16, wherein the inlet height is at least twice as large as the outlet height.
19. The assembly of claim 16, wherein the projections extend laterally inward and the corrugated pipe is received within the inlet end.
20. The assembly of claim 16, wherein the projections extend laterally outward and the inlet end is received within the corrugated pipe.

### **ABSTRACT OF THE DISCLOSURE**

The present invention provides an attachment for emitting water from a water source. The attachment comprises an inlet end, a transitional section connected to the inlet end, and an outlet end connected to the transitional section opposite from the inlet end. The inlet end also includes a plurality of resilient fingers, two or more of the fingers including a lateral projection.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	
<b>Filing Date:</b>	
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water with Connector for Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	W Haynes Sloan
<b>Filer:</b>	Phillip E. Walker
<b>Attorney Docket Number:</b>	002627

Filed as Small Entity

### Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Basic Filing:</b>				
Utility filing Fee (Electronic filing)	4011	1	82	82
Utility Search Fee	2111	1	270	270
Utility Examination Fee	2311	1	110	110

**Pages:**

**Claims:**

**Miscellaneous-Filing:**

**Petition:**

**Patent-Appeals-and-Interference:**

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>462</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	6472167
<b>Application Number:</b>	12620327
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1359
<b>Title of Invention:</b>	Low Profile Attachment For Emitting Water with Connector for Corrugated Pipe
<b>First Named Inventor/Applicant Name:</b>	W Haynes Sloan
<b>Customer Number:</b>	23456
<b>Filer:</b>	Phillip E. Walker
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	002627
<b>Receipt Date:</b>	17-NOV-2009
<b>Filing Date:</b>	
<b>Time Stamp:</b>	17:28:11
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$462
RAM confirmation Number	3987
Deposit Account	230035
Authorized User	

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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1	Application Data Sheet	Application_Data_Sheet_002627.pdf	964784 add42e2af4ce8c3434115b58a604aa6101ec212f	no	4
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	Claims		11	15	
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<b>Warnings:</b>					
<b>Information:</b>					
5	Fee Worksheet (PTO-875)	fee-info.pdf	32634 1d5548749d17ee22ea8b91443fce65217ec4954d	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			3759654		



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**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

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Application Number: 12620327

Document Date: 11/17/2009

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Form Revision Date: February 8, 2006

Filing Date: 11/17/2009

Approved for use through 7/31/2006. OMB 0651-0032  
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<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875	Application or Docket Number <b>12/620,327</b>
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APPLICATION AS FILED – PART I			2		OR		LARGE ENTITY	
(Column 1)			(Column 2)				(Column 3)	
	FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)		RATE (\$)	FEE (\$)
	BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	<b>82</b>		N/A	
	SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	<b>270</b>		N/A	
	EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	<b>110</b>		N/A	
	TOTAL CLAIMS (37 CFR 1.16(i))	<b>20</b>	1	X\$ 26	<b>0</b>		2X\$52	
	INDEPENDENT CLAIMS (37 CFR 1.16(h))	<b>3</b>	minus 3 =	X\$110	<b>0</b>		1X\$220	
	APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$270 (\$135 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR						
	MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
				195			390	
				<b>TOTAL</b>	<b>462</b>		<b>TOTAL</b>	

\* If the difference in column 1 is less than zero, enter "0" in column 2.

APPLICATION AS AMENDED – PART II					SMALL ENTITY		OR		OTHER THAN SMALL ENTITY		
(Column 1)					(Column 2)		(Column 3)		(Column 4)		
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)	
		Total (37 CFR 1.16(i))	*	Minus	**	=	X	=	X	=	
		Independent (37 CFR 1.16(h))	*	Minus	***	=	X	=	X	=	
		Application Size Fee (37 CFR 1.16(s))									
		FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						N/A			N/A		
						<b>TOTAL</b>			<b>TOTAL</b>		
						ADD'T FEE			ADD'T FEE		

APPLICATION AS AMENDED – PART II					SMALL ENTITY		OR		OTHER THAN SMALL ENTITY		
(Column 1)					(Column 2)		(Column 3)		(Column 4)		
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)	
		Total (37 CFR 1.16(i))	*	Minus	**	=	X	=	X	=	
		Independent (37 CFR 1.16(h))	*	Minus	***	=	X	=	X	=	
		Application Size Fee (37 CFR 1.16(s))									
		FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						N/A			N/A		
						<b>TOTAL</b>			<b>TOTAL</b>		
						ADD'T FEE			ADD'T FEE		

- \* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
- \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
- \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".  
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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