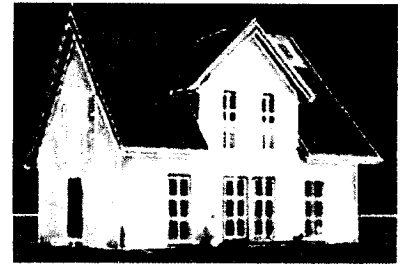


# H-Tech Contracting, LLC

MD Home Improvement Contractor License # 130333  
MD Home Builder Registration # 7446  
MD Commercial Construction Firm License # 12710281



601 Old Joppa Road  
Joppa, MD 21085  
443-760-0029 / 410-937-7476  
[www.h-techcontracting.com](http://www.h-techcontracting.com)



June 13, 2016

Office of Governor Nikki R. Haley  
1205 Pendleton Street  
Columbia, SC 29201

Dear Governor Haley,

My name is Craig Williams, owner of H-Tech Contracting, LLC, a full-service construction company based in MD. I have always been an environmentally conscious person since childhood. When I was recently working in Baltimore City, looking at the storm drains with trash piled up in front, just waiting for the next rainfall to sweep it into the Chesapeake Bay, I was inspired with an idea to correct the problem.

I have designed and patented the **"V-Grate" (Vertical Protection Grate, provisional patent #62218964, approved September 15, 2015)** a grate that covers the unprotected vertical opening of these storm drains. This product is made from simple steel components that are quickly welded and ready for installation within hours. This vertical grate will allow water to flow into the storm drain while "sifting" out large debris which is destroying our rivers, bays, streams and oceans. Implementation of the V-Grate could prevent tons of trash from entering storm drains, which ends up directly in our waterways, causing devastating pollution, such as the large garbage patches in our oceans, which are growing larger by the day. This idea has the potential to make global impact on the worldwide problem of pollution and it can start right in South Carolina with your help and support.

Please find enclosed the drawings and copy of the patent. South Carolina's storm drain systems could benefit by using this vertical protection grate that I patented. I estimate the cost to be approximately \$85 per linear foot, plus set up costs, to be determined based on location and size of the order. Hoping to hear from you soon and be given an opportunity to meet with you to provide a custom proposal to implement the patented V-Grate in South Carolina. We are prepared to set up and install these protection grates in any town in the U.S.

***This letter is being sent to all United States Governors.***

Respectfully yours,

Craig Williams

443-760-0029

***Over, please...see photos!***



*Without the V-Grate, large, unprotected vertical opening allows trash to go down the storm drain into our waterways, contributing to the global problem of pollution.*



*With the V-Grate, the vertical opening is protected! Large debris is prevented from entering storm drain, while water is allowed to flow freely!*

For a Custom Quote to protect the environment, using my Patented V-Grate, starting right in South Carolina, please contact:

Craig Williams,  
Owner  
H-Tech Contracting, LLC  
[craig@h-techcontracting.com](mailto:craig@h-techcontracting.com)  
443-760-0029 or 410-937-7476



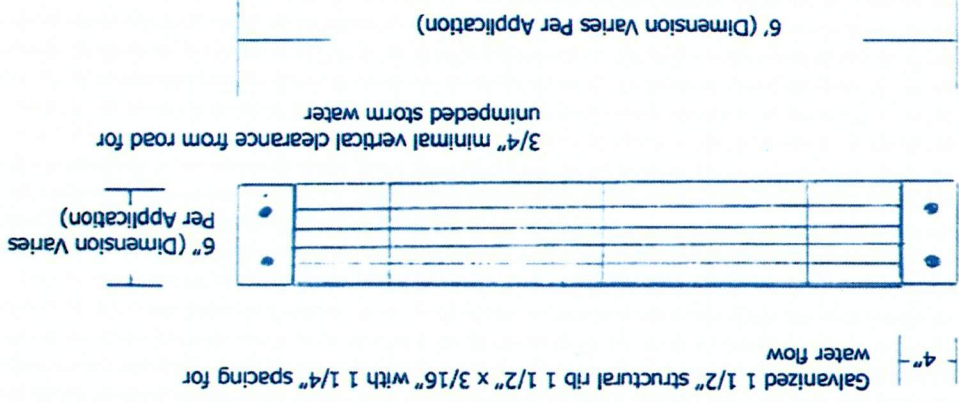
# **Invention Name: Vertical Protection Grate for Storm Water Drains "V-Grate"**

**Purpose:** To decrease pollution by preventing trash and debris from entering the storm drains via the area that is currently open and unprotected. This vertical grate will still allow water to flow into the storm drain, while "sifting" out large solid debris which is destroying our rivers, bays, streams and oceans.

**Inventor:** Craig Alan Williams      **Date of Application for Provisional Patent:** 07 September 2015

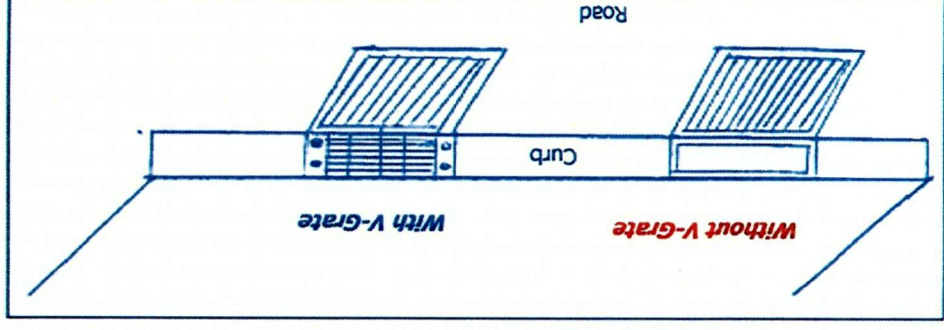


4" Galvanized Mounting  
Recessed Expansion  
Bolts secured by Epoxy  
Flush mounted to curb



**The Solution:** Install "V-Grate" at every storm water drain to decrease pollution and protect our environment.

- Notes:**
- Welded Ribs
  - Flush Mounted
  - Recessed Bolts Galvanized
  - 1/2" x 4" Galvanized Expansion Bolts Epoxied
  - 3/4" Clearance to Allow for Water Flow
  - For new construction application, V-Grate would be embedded into concrete during curb construction
  - Dimensions above are an example, application not limited to these. Actual dimensions will vary, according to size and location of storm drain.



# **PROVISIONAL APPLICATION FOR PATENT**

## **INVENTION TITLE**

**The Vertical Protection Grate for Storm Water Drains "V-Grate" will decrease pollution by preventing trash and debris from entering the storm drains via the area that is currently open and unprotected. This vertical grate will still allow water to flow into the storm drain, while "sifting" out large debris which is destroying our rivers, bays, streams and oceans.**

## **BACKGROUND OF THE INVENTION**

**Problem Solved:** My invention can help solve the problem of pollution and trash in our waterways, tributaries, and ocean.

There is no similar device that exists.

My system will prevent trash that accumulates in city streets from ever going down the storm drain, into our waterways causing pollution.

## **DETAILED DESCRIPTION OF THE INVENTION**

As stated above, my invention can help solve the problem of pollution and trash in our waterways, tributaries, and ocean. The invention claimed here can help solve this problem.

As a preventative measure, my invention restricts the entrance of trash via unprotected storm drains.

The claimed invention differs from what currently exists. Currently, nothing prevents the entrance of trash and large debris from entering storm drains, which ultimately ends up polluting our bays and streams and oceans. We need to start now with a simple but effective application of my idea.

This invention is an improvement on what currently exists. Currently, nothing prevents the entrance of trash and large debris from entering storm drains, which ultimately ends up polluting our bays and streams and oceans.

There is no similar device that exists. Large gaping vertical hole in every storm drain permit entrance of garbage into every storm drain could be eliminated by the use of my invention.

My system will prevent trash that accumulates in city streets from ever going down the storm drain, into our waterways causing pollution.

Also, this same application can produce vertical protection for large storm water culvert drains (i.e. round V-grate, same concept would apply).

### **ABSTRACT**

The Vertical Protection Grate for Storm Water Drains "V-Grate" will decrease pollution by preventing trash and debris from entering the storm drains via the area that is currently open and unprotected. This vertical grate will still allow water to flow into the storm drain, while "sifting" out large debris which is destroying our rivers, bays, streams and oceans is disclosed. My system will prevent trash that accumulates in city streets from ever going down the storm drain, into our waterways causing pollution.



# 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 or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
62/218,964	09/15/2015		65	514606162		

Craig Williams  
601 Old Joppa Road  
Joppa, MD 21085

## CONFIRMATION NO. 2317 FILING RECEIPT



0000000077759734

Date Mailed: 09/30/2015

Receipt is acknowledged of this provisional patent application. It will not be examined for patentability and will become abandoned not later than twelve months after its filing date. 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

### Inventor(s)

Craig Alan Williams, Joppa, MD;

### Applicant(s)

Craig Alan Williams, Joppa, MD;

Power of Attorney: None

If Required, Foreign Filing License Granted: 09/29/2015

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 62/218,964**

Projected Publication Date: None, application is not eligible for pre-grant publication

Non-Publication Request: No

Early Publication Request: No

**\*\* MICRO ENTITY \*\***

### Title

Vertical Protection Grate for Storm Water Drains "V-Grate" will decrease pollution by preventing trash and debris from entering the storm drains via the area that is currently open and unprotected. This vertical grate will still allow water to flow into the storm drain, while "sifting" out large debris which is destroying our rivers, bays, streams and oceans

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

## **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 (1-866-999-4258).

### **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.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

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).

---

### **SelectUSA**

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 U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.