



# HUNG TA GARDEN ENTERPRISE CO., LTD.

**Tel:886-49-2528280**

**Fax:886-49-2521619**

**website:www.aquahung.com**

## Multifunctional Elastic Extendable Garden Hose

*Developer & Manufacturer  
Hose specialist Since 1979*



*New.pet*



# Product development history and vision :

- ▶ With the continuous innovation of market demand, and to enable users to enjoy better product service and experience.
- ▶ The company is committed to the continuous development of multifunctional garden hose, household hose, and in response to market demand, and constantly improve the quality, in order to achieve the highest customer satisfaction as the ultimate goal. This product in both quality and function is a major innovation in the hose industry, the manufacture of multifunctional extendable garden hose in the quality of not only trustworthy, more recognized in the market and well received.



## The current situation of hose in a predicaments use in the market

- A. Still washing the car with a bucket?
- B. It's not cheap to pay for car washing.
- C. Water pressure small difficult to flush.
- D. Traditional hose are always knotted.
- E. Inferior hose are always damaged.



That is your daily life often encountered trouble?



# ★An innovative product that makes the market surprise - multifunctional Extendable



5/8"



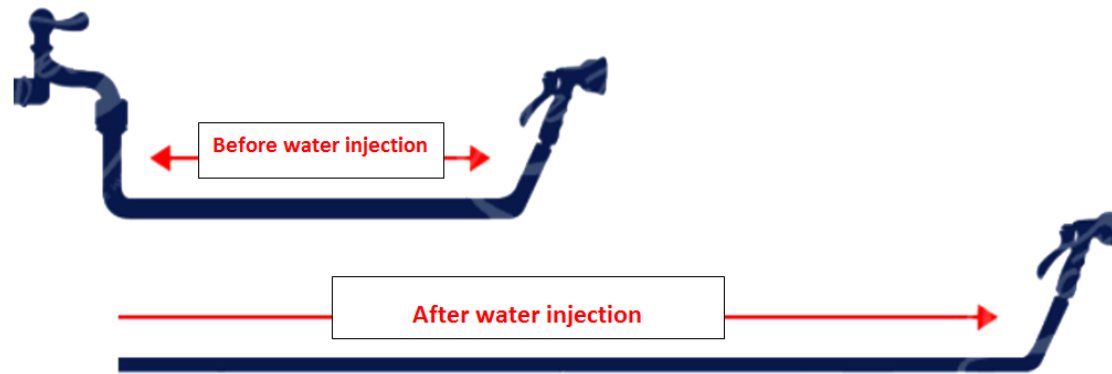
5/8"



5/8"

## How to use this hose ?

- ▶ Easy to use : It can be expanded 100% up to 2 times of its original length with water pressure, then retracts in a few seconds when the water is turned off.
- ▶ Suggested working water pressure at 3Bar (45psi).
- ▶ Instant burst pressure at 14bar for plastic quick connector and 250psi for male/female connector.



Inner and outer tube simultaneous extension.



- Lighter weight, easy for storage : 70% Lighter Weight Compared to Traditional hose, Wrapped Bobbin & Gripper tube, but small size 60%. (i.e. 50ft/15m)



VS



Scratch & ultra-abrasion resistant.



VS

Other brands non-abrasion resistance,  
easy breakage (general materials)



★Exclusive leak proof design (patented invention):

Prolong pipe life Movable "C " buckle to prevent locking the inner tube

Movable C buckle design purpose, after long-term use if the water pipe leaks, please lower hex joint lock up, you can stop water

Long-term use after the pipe wall thinning, when the resulting water pipe from the tap off, just can cut the leak, repair easy is the industry's only.

ABS material connector can afford long-time sunlight and it is not easy to brittle.



VS



Other brands : Plastic sleeve is prone to bursting and unstable.

Plastic cover  
Easy to burst and very weak





# C Buckle design for better leak proof !



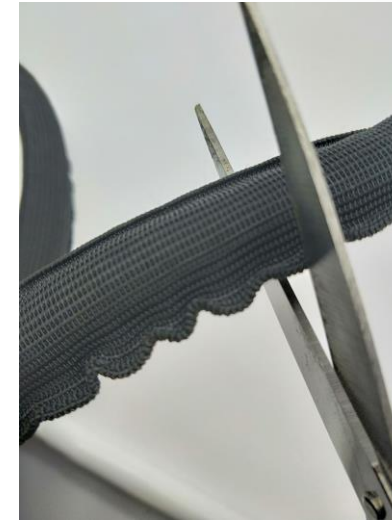
VS



## Self-repairing teaching when water pipes are leaking



1. Cut the broken place with scissors off



2. Remove C-buckle



3. Re-insert the inner & outer tube into the connector and fasten the C-buckle



4. Ensure of locking the C-buckle, push the hex joint upward and tighten the water pipe in the right hand.



5. Tighten the male connector to tighten the clockwise



6. Self-repair completed !





## ◆Durable design of raw materials

1.High-strength flat woven fabric, abrasion resistant, extended service life



### Material :

- ◆ High-strength polyester fiber weaving

### Features :

- ◆ Anti-UV 300 hours
- ◆ Compliance with EU non-toxic inspection standards
- ◆ Compliance California 65
- ◆ Longitudinal expandable
- ◆ High-strength Tetoron increases wear resistance.

## ◆Integrated explosion-proof inner tube with heat-resistant material :

With high strength woven fabric tube, which can withstand 40 PSI-100 PSI water pressure without burst.



### Material :

- ◆ TPE composite material

### Features :

- ◆ Heat resistant up to 50°C
- ◆ Cold resistant -20°C
- ◆ Compliance with EU non-toxic inspection standards
- ◆ Compliance California 65
- ◆ Longitudinal / Lateral expansion and contraction





◆ Make your work easier: watering flowers, cleaning, car wash, pet bathing, etc.





# Tedron polyester fiber weaving : Non-toxic certificate



ISO 9001  
Certified Worldwide

DyStar Colours Distribution GmbH, Cologne Office, Julius-Bau-Straße 2, D- 51063 Köln

## To whom it may concern

Your ref / Your message	Our ref / Our message	Phone / Fax	Köln
		+49(0)221-933170-35	2016-03-17
		+49(0)221-933170-70	RoHS.doc

### DyStar Letter of Confirmation

This is to confirm that DyStar dyestuff-, pigment- and auxiliary preparations do not contain any of the hazardous substances listed in the **European RoHS directive 2011/65/EC** as intentional components.

All DyStar dyestuff, pigment and auxiliary preparations can be used for the treatment of electronic parts in full compliance with the RoHS directive 2011/65/EC, amended 31.03.2015.

The following limits for hazardous substances in electronic articles as set in EU Commission Decisions currently set into force and amending the Annex of the RoHS directive 2011/65/EC cannot be violated by the use of DyStar products:

- **Lead, mercury, hexavalent chromium: 0.1 % each**
- **Cadmium: 0.01 %**
- **polybrominated Biphenyls (PBB) or polybrominated Diphenylethers (PBDE): 0.1 %**
- **Bis(2-ethylhexyl)phthalat (DEHP): 0.1 %**
- **Benzylbutylphthalat (BBP): 0.1 %**
- **Dibutylphthalat (DBP): 0.1 %**
- **Diisobutylphthalat (DIBP): 0.1 %**

Furthermore, we declare that the **directive 2012/19/EU** of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (**WEEE**) is not of relevance according to DyStar dyestuff-, pigment- and auxiliary preparations.

All products are supplied subject to DyStar's standard Terms and Conditions of Sale.

With best regards  
DyStar Colours Distribution GmbH

*Dr. Dietmar Fiedel*

Dr. Dietmar Fiedel  
Technology  
Global Product Safety & Ecology

Commerzbank AG Frankfurt am Main  
Bank Code: 500 400 00  
Account No.: 632 8777 00  
IBAN DE44 5004 0000 0632 8777 00  
SWIFT COBADE33XXX

Reg. Office: Frankfurt am Main  
AG Frankfurt HRB 86808  
General Manager:  
Eric Hopmann  
Xu Yelin, Jianfang Yao, Luo Bin  
Suresh Kumar Saveljibhai Gondalla,  
Shankarbhairu Rughnathibhai Patel

DyStar Colours Distribution GmbH  
Correspondence Address:  
Cologne Office, Julius-Bau-Straße 2, D-51063 Köln  
Phone (+49) 221 933170- Fax (+49) 221 933170 70  
www.dystar.com

# ABS Plastic Connector : Non-toxic certificate

## FORMOSA CHEMICALS & FIBRE CORP.

201, Tung Hwa N. Road Taipei, Taiwan, R.O.C.

Fax: +886-2-27131649 Tel: +886-2-27122211

ABS

### Certificate of Product Safety

May 12, 2014

Dear Sirs :

We hereby certify that the following resin produced by Formosa Chemicals & Fibre Corporation listed below:

TAIRILAC ABS AG1000, AG12A0, AG12A1, AG12A1-H, AG12A3, AG12AJ, AG15A0, AG15A1, AG15A1-H, AG15A2, AG15A3, AG15AB, AG15AJ, AG15AM, AG15E0, AG15E1, AG15E1-H, AG15E3, AF3500, AF3535, AF3560, AF3600, AX4000, AX4100, AX4300, AG22AT, AT5500, AT5800, AG10NP, AG10AP, AE8000, AE8200, AH2003, ANC100, ANC120,

TAIRILAC ASA WG1700, WF3300, WE8100, WE8500

TAIRISAN SAN NF2100, NF2200, NF2200AE, NX3200, NX3400,

TAIRIREX PS GP5000, GP5250, GP525N, GP5350, GP535A, GP535N, GP5500, GP550N, GP550N-1Y, MP6500, HP8250, HP9450

TAIROLOY PC/ABS AC2000, AC2100, AC2300, AC2400, AC2500, AC3100, AC3100AF, AC3250

TAIRILITE PC AC2820, AC2821, AC3830, AC3831, AC3400, AC3600, AC3610, AC3700, AC3710, AC3800, AC3900,

conforms to the requirement that no chemicals as following are added.

1. PBBEs (Poly Bromo Bisphenyl Ethers),
2. PBBs (Poly Bromo Bisphenyls),
3. Ozone Depleting Chemicals (CFCs & HCFCs),
4. Short Chain Chlorinated Paraffin (C10-C13),
5. Polyvinyl Chloride (PVC),
6. Mercury (Hg) and its compounds,
7. Lead (Pb) and its compounds,
8. Cadmium (Cd) and its compounds,
9. Chromium (Cr) and its compounds,
10. Arsenic (As) and its compounds,
11. Antimony (Sb) and its compounds,
12. Selenium (Se) and its compounds,
13. Barium (Ba) and its compounds,
14. Chromium (Cr) VI and its compounds,
15. Organic tin compounds,
16. Polychlorinated Biphenyls (PCBs) and Terphenyls (PCTs),

P.1/2

[9008251csm\_20140425\_A111]

## FORMOSA CHEMICALS & FIBRE CORP.

201, Tung Hwa N. Road Taipei, Taiwan, R.O.C.

Fax: +886-2-27131649 Tel: +886-2-27122211

ABS

17. Poly naphthalenes,
18. Azo compounds,
19. Polychlorinated naphthalene,
20. Asbestos,
21. Phthalates (DEHP/BBP/DBP/DINP/DIDP/DNOP/DMP/DEP/DPHP/DNBP/DCHP/DnHP/DIBP/DPHP/DIOP)
22. Nonyl-phenol (NP),
23. Nonyl-phenol-ethoxylates (NPE),
24. 2-(2'-Hydroxy-3',5'-di-tert-butylphenyl)benzotriazole,
25. Red phosphorus,
26. Perfluorooctane sulfonate (PFOS) & Perfluorooctanoic acid (PFOA)
27. Dimethylformamide(DMF)

With regard to composition of above grades, they can comply with the Directives of RoHS (2002/95/EC), 2003/11/EC, EN71 part 3 and SONY standard (SS-00259).

Sincerely Yours,

*Kuo - Cheng Chen*

Kuo-Cheng Chen  
R & D Department  
Plastics Division



# Plastic non-toxic substance declaration

FORMOSA CHEMICALS & FIBRE CORP.  
201, TUNG HWA N.R., TAIPEI, TAIWAN R.O.C.  
FAX: 886-2-27180358 TEL: 886-2-27122211

## Certificate of Product Safety

Dear Sirs :

We hereby certify that the following TAIRIPRO resin produced by Formosa Chemicals & Fibre Corporation.

Homo Grade B1101, F1611, F2003, F2011, K1011, K1023, K1035, K1108, K1525, K2038, K2051, K2065, S1003, S1005, S1019, S1023, S1040, S1803, S2023, S2035, S2123, T1002, T1202, T2502, K1060  
Random Grade F4002, F4007, F4008, K4015, K4038, K4502, K4515, K4535, K4635, K4715, T4002, T3002, K4650, B8001, BC03ZX, K3004, K3009AU, K3029, K7005(A), K8003, K8005, K8009, K8025, K8050, K8065, K8802, K9003, K9010, K9017, KP03B, T7002, T8002, K3009AN, K7009(AH), K7025  
Copo Grade

conforms to the requirement that no chemicals as following are added.

1. PBBEs (Poly Bromo Bisphenyl Ethers),
2. PBBs (Poly Bromo Bisphenyls),
3. Ozone Depleting Chemicals (CFCs & HCFCs),
4. Chlorinated Paraffin (C10-C13),
5. Polyvinyl Chloride (PVC),
6. Mercury (Hg) and its compounds,
7. Lead (Pb) and its compounds,
8. Cadmium (Cd) and its compounds,
9. Chromium (Cr) and its compounds,
10. Arsenic (As) and its compounds,
11. Antimony (Sb) and its compounds,
12. Selenium (Se) and its compounds,
13. Barium (Ba) and its compounds,
14. Chromium (Cr) VI and its compounds,
15. Organic tin compounds,
16. Polychlorinated Biphenyls (PCBs) and Terphenyls (PCTs),
17. Poly naphthalenes,
18. Azo compounds,
19. Polychlorinated naphthalene,
20. Asbestos,
21. Phthalates (DEHP / BBP / DBP / DINP / DIDP / DNOP / DMP / DEP / DPP / DNP / DCHP / DnHP / DiBP / DPHP / DIOP),
22. Nonyl-phenol (NP),
23. Nonyl-phenol-ethoxylates (NPE),
24. 2-(2'-Hydroxy-3',5'-di-tert-butylphenyl)benzotriazole

With regard to composition of above grades, they can comply with the Directives of RoHS (2002/95/EC), 2003/11/EC, TCO'99, Blue Angel and SONY standard (SS-00259).

Sincerely Yours,

Kuo-Cheng Chen  
Kuo-Cheng Chen  
R & D Department  
Plastics Division



# CHIMEI

奇美實業股份有限公司  
CHI MEI CORPORATION

59-1 SAN CHIA, JEN TE, TAINAN COUNTY, TAIWAN.  
TEL: 886-6-266-5000 FAX: 886-6-266-5555~7

- |  |   |
|--|---|
| (PCTs) and Naphtalenes (PCNs)                                  | 44. Polyamide                             |
| 20. Poly naphthalenes  | 45. PVDC (polyvinylidene chloride)        |
| 21. Azo colorants (according to REACH-ANNEX-XVII-APPENDIX 8)   | 46. ESBO (Expoxidized soybean oil)        |
| 22. Asbestos   | 47. Formamide                             |
| 23. Phthalates   | 48. Hexabromocyclododecane (HBCDD)        |
| 24. Octylphenol(OP), Nonylphenol(NP)                           | 49. Red phosphorus                        |
| 25. Octylphenol ethoxylates(OPE), Nonylphenol ethoxylates(NPE) | 50. Aniline + formaldehyde polycondensate |

With regard to composition of above grades of products, the aforesaid products comply with the Directives of RoHS (2011/65/EC), 2003/11/EC, TCO'99, Blue Angel and SONY Standard (SS-00259).

Sincerely Yours,

Perry D. B. Shiueh

Perry D. B. Shiueh

Vice President of R&D Division



# SGS Testing Report : The inner tube does not contain eight heavy metals (left one)

## The inner tube complies with the REACH standard (right one)

### 測試結果(Test Results)

測試部位(PART NAME)No. 1 : 整體混測 (MIXED ALL PARTS)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
溶出銻 / Soluble Antimony (Sb)	mg/kg	參考ASTM F963-11 Clause 8.3方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to ASTM F963-11 Clause 8.3. Analysis was performed by ICP-AES.	5	n. d.
溶出砷 / Soluble Arsenic (As)	mg/kg		2.5	n. d.
溶出鋇 / Soluble Barium (Ba)	mg/kg		10	n. d.
溶出鎘 / Soluble Cadmium (Cd)	mg/kg		5	n. d.
溶出鉻 / Soluble Chromium (Cr)	mg/kg		5	n. d.
溶出鉛 / Soluble Lead (Pb)	mg/kg		5	n. d.
溶出汞 / Soluble Mercury (Hg)	mg/kg		5	n. d.
溶出硒 / Soluble Selenium (Se)	mg/kg		5	n. d.

### 備註(Note):

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n. d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. 樣品的測試是基於申請人要求混合測試，報告中的混合測試結果不代表其中個別單一材質的含量. (The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.)

### 測試樣品(Test Sample):

測試部位(PART NAME) No. 1 : 整體混測 (MIXED ALL PARTS)

### 測試結果 (Test Results) (單位Unit: %)

物質名稱 (Substance Name)	報告 極限值 (RL)	結果 (Result)	分類 (Classification)
		No. 1	
蒽 / Anthracene (CAS No.: 120-12-7)	0.05	n. d.	PBT
4,4' - 二氨基二苯甲烷 / 4,4' - Diaminodiphenylmethane (CAS No.: 101-77-9)	0.05	n. d.	CC 1B
鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No.: 84-74-2)	0.05	n. d.	TRC 1B
鄰苯二甲酸丁苄酯 / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)	0.05	n. d.	TRC 1B
鄰苯二甲酸二 (2-乙基己基) 酯 / DEHP (Bis (2-ethyl(hexyl) phthalate)) (CAS No.: 117-81-7)	0.05	n. d.	EQC
二甲苯麝香 / 5-tert-butyl-2,4,6-trinitro- m-xylene (Musk Xylene) (CAS No.: 81-15-2)	0.05	n. d.	vPvB
六溴環十二烷及所有主要被辨別出的異構物 / Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α- HBCDD, β- HBCDD, γ- HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	0.05	n. d.	PBT
短鏈氯化石蠟 / Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (CAS No.: 85535-84-8)	0.05	n. d.	PBT
氧化雙三丁基錫 / Bis(tributyltin)oxide (TBTO)*** (CAS No.: 56-35-9)	-	n. d.	PBT
二氯化鈷 / Cobalt dichloride (CAS No.: 7646-79-9)	0.005	n. d.	CC 1B; TRC 1B
五氧化二砷 / Diarsenic pentaoxide*** (CAS No.: 1303-28-2)	-	n. d.	CC 1A
三氧化二砷 / Diarsenic trioxide*** (CAS No.: 1327-53-3)	-	n. d.	CC 1A
三乙基砷酸酯 / Triethyl arsenate*** (CAS No.: 15606-95-8)	-	n. d.	CC 1A
砷酸氫鉛 / Lead hydrogen arsenate*** (CAS No.: 7784-40-9) (※1)	-	n. d.	CC 1A; TRC 1A
鉻酸鈉 / Sodium chromate*** (CAS No.: 7775-11-3)	-	n. d.	CC 1B; MC 1B; TRC 1B
重鉻酸銨 / Ammonium dichromate*** (CAS No.: 7789-09-5)	-	n. d.	CC 1B; MC 1B; TRC 1B
重鉻酸鉀 / Potassium dichromate*** (CAS No.: 7778-50-9)	-	n. d.	CC 1B; MC 1B; TRC 1B

# SGS Testing Report : Inner tube does not contain PAHS

## 測試結果(Test Results)

測試部位(PART NAME) No.1 : 整體混測 (MIXED ALL PARTS)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) No. 1
多環芳香烴 / Polynuclear Aromatic Hydrocarbons (PAHs)				
芴 / Acenaphthene (CAS No. : 83-32-9)	mg/kg	參考AfPS GS 2014:01 PAK方法, 以氣相層析/質譜儀檢測。 / With reference to AfPS GS 2014:01 PAK method. Analysis was performed by GC/MS.	0.2	n. d.
芴烯 / Acenaphthylene (CAS No. : 208-96-8)			0.2	n. d.
蒽 / Anthracene (CAS No. : 120-12-7)			0.2	n. d.
苯駢蒽 / Benzo[a]anthracene (CAS No. : 56-55-3)			0.2	n. d.
苯駢(a)芘 / Benzo[a]pyrene (CAS No. : 50-32-8)			0.2	n. d.
苯(b)苯駢芘 / Benzo[b]fluoranthene (CAS No. : 205-99-2)			0.2	n. d.
苯駢芘 / Benzo[g,h,i]perylene (CAS No. : 191-24-2)			0.2	n. d.
苯(k)苯駢芘 / Benzo[k]fluoranthene (CAS No. : 207-08-9)			0.2	n. d.
Chrysene (CAS No. : 218-01-9)			0.2	n. d.
二苯駢蒽 / Dibenzo[a,h]anthracene (CAS No. : 53-70-3)			0.2	n. d.
苯駢芘 / Fluoranthene (CAS No. : 206-44-0)			0.2	n. d.
芘 / Fluorene (CAS No. : 86-73-7)			0.2	n. d.
茚酮芘 / Indeno[1,2,3-c,d] pyrene (CAS No. : 193-39-5)			0.2	n. d.
萘 / Naphthalene (CAS No. : 91-20-3)			0.2	n. d.
菲 / Phenanthrene (CAS No. : 85-01-8)			0.2	n. d.
芘 / Pyrene (CAS No. : 129-00-0)			0.2	n. d.
苯(j)苯駢芘 / Benzo[j]fluoranthene (CAS No. : 205-82-3)			0.2	n. d.
苯駢(e)芘 / Benzo[e]pyrene (CAS No. : 192-97-2)			0.2	n. d.
多環芳香烴18項總和 / Sum of 18 PAHs			-	n. d.

## 備註(Note) :

1. mg/kg = milligram per kilogram
2. n. d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. "-" = Not Regulated (無規格值)
5. 樣品的測試是基於申請人要求混合測試, 報告中的混合測試結果不代表其中個別單一材質的含量. (The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.)



◆ Hung Ta had obtained patents :

Ensure product quality and avoid confusion with counterfeit goods

- ▶ Patent No. Taiwan: M479372
- ▶ Patent No. China : 4019633
- ▶ Patent No. US : US9074711 B2
- ▶ Patent No. Canada : 2871894
- ▶ Patent No. Germany : DE202014102064U1



# 中華民國專利證書

新型第 M 479372 號

新型名稱：伸縮水管之管接頭結構

專利權人：黃煌富

新型創作人：黃煌富

專利權期間：自 2014 年 6 月 1 日至 2023 年 12 月 3 日止

上開新型業依專利法規定通過形式審查取得專利權  
行使專利權如未提示新型專利技術報告不得進行警告

經濟部智慧財產局

局長 王美花

中華民國

103



月

1

日

## Taiwan Patent And China Patent

证书号第 4019633 号



## 实用新型专利证书

实用新型名称：包括伸缩水管与管接头的装置

发明人：黄煌富

专利号：ZL 2014 2 0282841.1

专利申请日：2014 年 05 月 29 日

专利权人：黄煌富

授权公告日：2014 年 12 月 24 日

本实用新型经过本局依照中华人民共和国专利法进行初步审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

本专利的专利权期限为十年，自申请日起算。专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年 05 月 29 日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。



局长  
申长雨

申长雨



第 1 页 (共 1 页)

The  
United  
States  
of  
America



The Director of the United States  
Patent and Trademark Office

*Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.*

Therefore, this

United States Patent

*Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.*

*Michelle K. Lee*

Director of the United States Patent and Trademark Office



US009074711B2

(12) **United States Patent**  
**Huang**

(10) **Patent No.:** **US 9,074,711 B2**  
(45) **Date of Patent:** **Jul. 7, 2015**

(54) **AXIALLY EXPANSIBLE PIPE ASSEMBLY**

(56) **References Cited**

(71) Applicant: **Huang Fu Huang**, Changhua County (TW)

(72) Inventor: **Huang Fu Huang**, Changhua County (TW)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 84 days.

(21) Appl. No.: **14/012,955**

(22) Filed: **Aug. 28, 2013**

(65) **Prior Publication Data**

US 2015/0061281 A1 Mar. 5, 2015

(51) **Int. Cl.**  
**F16L 31/00** (2006.01)  
**F16L 39/00** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **F16L 39/005** (2013.01)

(58) **Field of Classification Search**  
USPC ..... 138/118, 119; 285/222.1, 242  
See application file for complete search history.

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Primary Examiner — Aaron Dunwoody

(57) **ABSTRACT**

An axially expandible pipe assembly includes at least one internal pipe and an external pipe. The internal pipe is axially and radially expandible. The external pipe is only axially expandible. The axially expandible external pipe is used to wrap the internal pipe and confine radial expansion of the axially and radially expandible internal pipe in a predetermined range.

**12 Claims, 6 Drawing Sheets**

US Patent



# BUNDESREPUBLIK DEUTSCHLAND

## URKUNDE

über die Eintragung des

## Gebrauchsmusters

Nr. 20 2014 102 064.0

### IPC

F16L 33/24

### Bezeichnung

Schlauch-Anschlussstück-Verbindung

### Gebrauchsmusterinhaber

Huang Fu, Huang, Fenyuan, Changhua, TW

### Tag der Anmeldung

02.05.2014

### Tag der Eintragung

30.06.2014

### Priorität

20.08.2013 TW 102215626

04.12.2013 TW 10222745

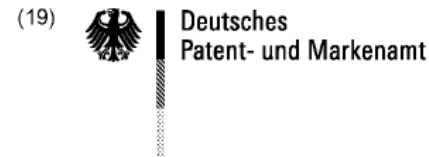
Die Voraussetzungen der Schutzfähigkeit, insbesondere die Neuheit des Gegenstandes wurden im Eintragungsverfahren nicht geprüft.



Die Präsidentin des Deutschen Patent- und Markenamts

*Rudloff-Schäffer*

Rudloff-Schäffer



(10) **DE 20 2014 102 064 U1** 2014.08.07

## (12) Gebrauchsmusterschrift

(21) Aktenzeichen: **20 2014 102 064.0**

(22) Anmeldetag: **02.05.2014**

(47) Eintragungstag: **30.06.2014**

(45) Bekanntmachungstag im Patentblatt: **07.08.2014**

(51) Int Cl.: **F16L 33/24** (2006.01)

(30) Unionspriorität:

**102215626**

**20.08.2013**

**TW**

**10222745**

**04.12.2013**

**TW**

(74) Name und Wohnsitz des Vertreters:

**Beck & Rössig - European Patent Attorneys,  
81679, München, DE**

(73) Name und Wohnsitz des Inhabers:

**Huang Fu, Huang, Fenyuan, Changhua, TW**

Die folgenden Angaben sind den vom Anmelder eingereichten Unterlagen entnommen

(54) Bezeichnung: **Schlauch-Anschlussstück-Verbindung**

# Germany patent



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d'Industrie Canada

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Office

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Industry Canada

CA 2871894 A1 2015/06/04

(21) **2 871 894**

(12) **DEMANDE DE BREVET CANADIEN  
CANADIAN PATENT APPLICATION**

(13) **A1**

(22) **Date de dépôt/Filing Date:** 2014/11/24

(41) **Mise à la disp. pub./Open to Public Insp.:** 2015/06/04

(30) **Priorité/Priority:** 2013/12/04 (TW102222745)

(51) **Cl.Int./Int.Cl.** *F16L 33/22* (2006.01),  
*D03D 15/08* (2006.01), *F16L 11/12* (2006.01)

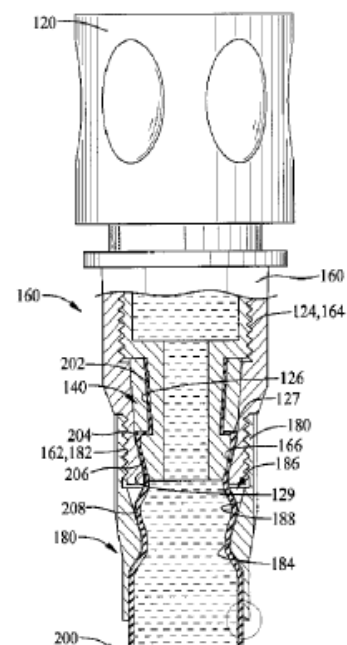
(71) **Demandeur/Applicant:**  
HUANG, HUANG FU, TW

(72) **Inventeur/Inventor:**  
HUANG, HUANG FU, TW

(74) **Agent:** RICHES, MCKENZIE & HERBERT LLP

(54) **Titre : AGENCEMENT DE TUYAU ET DE RACCORD**

(54) **Title: HOSE-JOINT COMBINATION**



# Canada patent



# Youtube

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## YouTubeFilm introduction

<https://www.youtube.com/watch?v=77UWrHf5G0U&feature=youtu.be>

**C buckle DIY repair : film teaching 6 minutes from the start**

<https://mobile.twitter.com/StanleyToolsCA/status/971068077583446016>