

MULTIFUNCTIONAL ELASTIC EXTENDABLE GARDEN HOSE

*Developer & Manufacturer
Hose specialist Since 1979*



New.pet



HUNG TA GARDEN ENTERPRISE CO., LTD

Tel: 886-49-2528280

Fax: 886-49-2521619

website: <https://www.aquahung.com/>

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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



That is your daily life often encountered trouble?

- 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.

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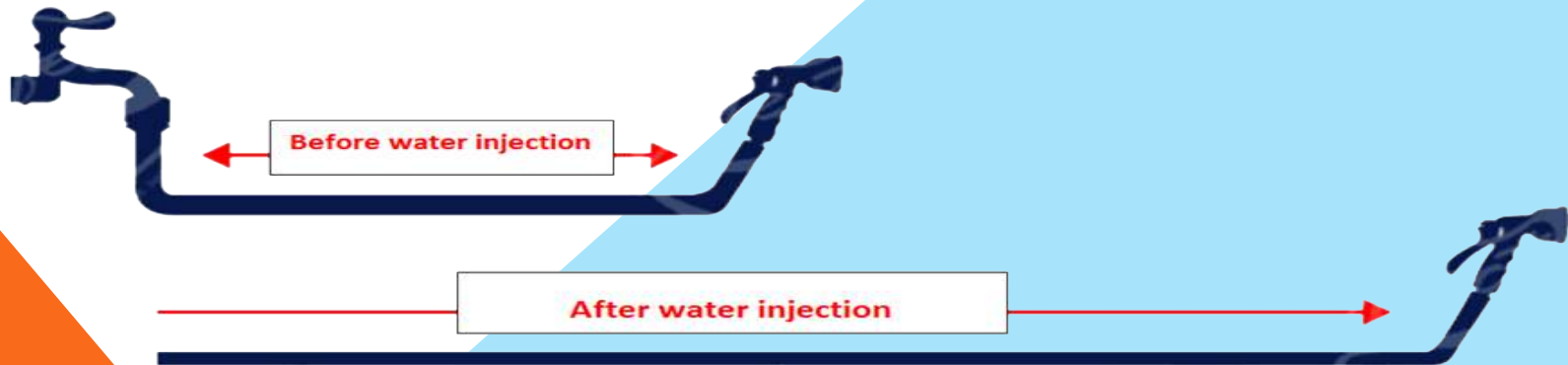
AN INNOVATIVE PRODUCT THAT MAKES THE MARKET SURPRISE – MULTIFUNCTIONAL EXTENDABLE



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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) or 5Bar (70psi).
- Instant burst pressure at 17.5Bar (250psi).



Inner and outer tube simultaneous extension.

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➤ 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



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Scratch & ultra-abrasion resistant.



VS



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



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Exclusive leak proof design (patented invention):



VS

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.



Plastic cover

Easy to burst and very weak

Other brand

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

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C BUCKLE DESIGN FOR BETTER LEAK PROOF !



VS



Conventional hose:
prone to leak

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SELF-REPAIRING TEACHING WHEN WATER PIPES ARE LEAKING

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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

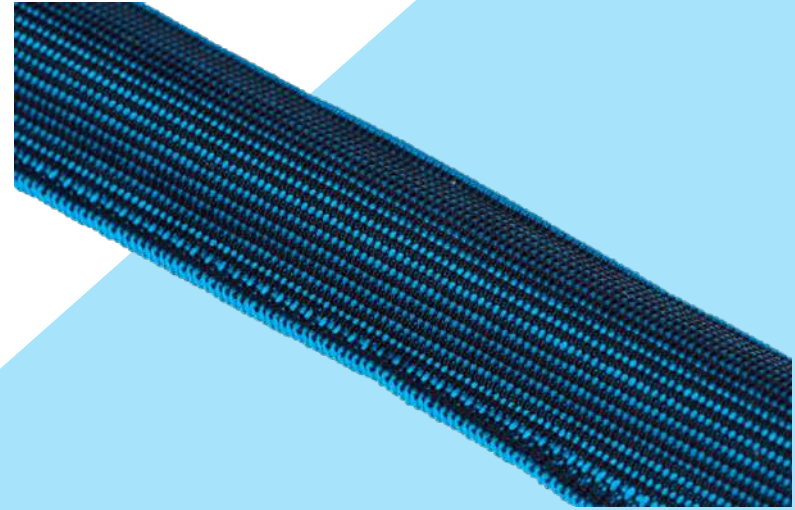
High-strength flat woven fabric, abrasion resistant, extended service life

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 40psi – 100psi water pressure without burst.

Material :

- ◆ TPE composite material

Features :

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



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user-friendly tools

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



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Tetoron polyester fiber weaving :

Non-toxic certificate

DyStar.
ISO 9001
Certified Worldwide

DyStar Colours Distribution GmbH, Cologne Office, Julius-Bae-Straße 2, D-50669 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: 250 400 00
Account No.: 893 8777 06
IBAN DE44 2504 0000 0003 8777 06
SWIFT CODE: COMDE333

Reg. Office: Frankfurt am Main
AG Frankfurt HGB 18846
General Manager:
Eric Hopmann
Xin Yao Yelin, Jianfeng Yao, Lian Bin
Suresh Kumar Suresh Kumar Sundala
Shankarshai Raghunathshai Patel

DyStar Colours Distribution GmbH
Correspondence Address:
Cologne Office, Julius-Bae-Straße 2, D-50669 Köln
Phone (49) 221 933170- Fax (49) 221 933170 70
www.dystar.com

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ABS Plastic Connector :

Non-toxic certificate

ABS FORMOSA CHEMICALS & FIBRE CORP.
201, Tung Hwa N. Road Taipei, Taiwan, R.O.C.
Fax: +886-2-27131649 Tel: +886-2-27122211

17. Poly naphthalenes,
18. Azo compounds,
19. Polychlorinated naphthalene,
20. Asbestos,
21. Phthalates (DEHP/BBP/DBP/DINP/DIDP/DNOP/DMP/DEP/DPP/DNP/DCHP/DaHP/DIBP/DPpP/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



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

TAIRILOY 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),

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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

PP

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,
Copo Grade	B8001, BC03ZX, K3004, K3009AU, K3029, K7005(A), K8003, K8005, K8009, K8025, K8050, K8065, K8802, K9003, K9010, K9017, KP03B, T7002, T8002, K3009AN, K7009(AH), K7025

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 / DuHP / DMBP / DPVP / DOP),
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
CHIMEI CORPORATION

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

- | | |
|--|---|
| (PCTs) and Naphthalenes (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. Shieh

Perry D. B. Shieh

Vice President of R&D Division

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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) No.1	分類 (Classification)
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
鄰苯二甲酸丁苯酯 / 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-ethylhexyl) 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)	-	n. d.	CC 1A; TRC 1A
(參1)			
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[a]芘 / Benzo[a]anthracene (CAS No. : 56-55-3)			0.2	n.d.
苯[a]芘 / Benzo[a]pyrene (CAS No. : 50-32-8)			0.2	n.d.
苯[b]芘 / Benzo[b]fluoranthene (CAS No. : 205-99-2)			0.2	n.d.
苯[ghi]芘 / Benzo[ghi]perylene (CAS No. : 191-24-2)			0.2	n.d.
苯[k]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[a,h]芘 / Dibenzo[a,h]anthracene (CAS No. : 53-70-3)			0.2	n.d.
苯[a]芘 / Fluoranthene (CAS No. : 206-44-0)			0.2	n.d.
芘 / Fluorene (CAS No. : 86-73-7)			0.2	n.d.
茚[1,2,3-c,d]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]芘 / Benzo[j]fluoranthene (CAS No. : 205-82-3)			0.2	n.d.
苯[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: TWM479372 & TWM479372
- ◆ Patent No. China : CN204042266
- ◆ Patent No. US : US9074711 B2 & US9453601 B2
- ◆ Patent No. Canada : CA 2871894 A1
- ◆ Patent No. Germany : DE202014102064U1
- ◆ Patent No. Spain : ES1296861U



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TIMEFRAME OF INVENTION PATENTS

HUNG TA GARDEN ENTERPRISE CO., LTD.

Patent No.: TWM469410
(伸縮水管裝置)
Filing date: Aug.20.2013

Patent No.: TWM479372
(伸縮水管之管接頭結構)
Filing date: Dec.04.2013
Date of Patent: Jun.01.2014

Patent No.: CN204042266
(伸縮水管與管接頭的裝置)
Filing date: May.29.2014
Date of Patent: Dec.24.2014

Patent No.: CA 2871894 A1
(HOSE-JOINT COMBINATION)
Filing date: Nov.24.2014
Date of Patent: Jun.04.2015

Years of 2013

Years of 2014

Expiration Years
of 2033

Patent No.: US 9,074,711 B2
(AXIALLY EXPANSIBLE PIPE ASSEMBLY)
Filing date: Aug.28.2013
Date of Patent: Jul. 7, 2015

Patent No.: US 9,453,601 B2
(JOINT FOR EXPANSIBLE HOSE)
Filing date: Dec.12.2013
Date of Patent: Sep. 27, 2016

Patent No.: DE 20 2014 102 064 U1
(Schlauch-Anschlussstück-Verbindung)
Filing date: May.02.2014
Date of Patent: Aug.07.2014

AquaHung

中華民國專利證書

新型第 M469410 號

新 型 名 稱：伸縮水管裝置

專 利 權 人：黃美菁

新 型 創 作 人：黃煜富

專利權期間：自 2014 年 1 月 1 日至 2023 年 8 月 19 日止

上開新型係依專利法規定通過形式審查取得專利權
行使專利權如未標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

洪淑敏

中華民國 110 年 12 月 3 日 (換發)

註記：專利權人應於公開網站中，將專利權狀態變更情形公開通知。



Aqua Hung

US patent

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

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(*) 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

U.S. PATENT DOCUMENTS

4,923,223 A * 5/1990 Seckel 285/148.13
5,468,129 A * 11/1995 Sunden et al. 417/477.12
5,662,144 A * 9/1997 Lo et al. 138/119
5,918,640 A * 7/1999 Orcutt 138/109
6,098,666 A * 8/2000 Wells et al. 138/115
6,113,153 A * 9/2000 Yang 285/55
8,291,941 B1 * 10/2012 Berardi 138/118
8,291,942 B2 * 10/2012 Berardi 138/118
8,479,776 B2 * 7/2013 Berardi 138/118
8,757,213 B2 * 6/2014 Berardi 138/118
2005/0087251 A1 * 4/2005 Sumitomo 138/177
2005/0115622 A1 * 6/2005 Bennett et al. 138/119
2005/0246855 A1 * 11/2005 Stockton et al. 15/323
2007/0000550 A1 * 1/2007 Osinski 138/118
2010/0006171 A1 * 1/2010 Tomlin et al. 138/104

* cited by examiner

Primary Examiner — Aaron Dunwoody



US009453601B2

(12) United States Patent Huang

(10) Patent No.: **US 9,453,601 B2**
(45) Date of Patent: **Sep. 27, 2016**

(54) JOINT FOR EXPANSIBLE HOST

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

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 371 days.

(21) Appl. No.: **14/105,170**

(22) Filed: **Dec. 12, 2013**

4,162,092 A * 7/1979 Hayes F16L 33/224
4,427,219 A * 1/1984 Madej 285/148.18
4,736,969 A * 4/1988 Fouts F16L 47/04
5,332,269 A * 7/1994 Hornum 285/249
5,797,633 A * 8/1998 Katzer F16L 33/223
6,347,729 B1 * 2/2002 Sprigel 285/245
2004/0217589 A1 * 11/2004 Mittersteiner F16L 33/222
2011/0163530 A1 * 7/2011 Shih F16L 33/225
2013/0087205 A1 * 4/2013 Berardi F16L 33/224
F16L 11/00
137/1

AquaHung

Germany 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 102222745

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



Die Präsidentin des Deutschen Patent- und Markenamts

Rudolf-Schäffer

Rudolf-Schäffer

(19)  Deutsches
Patent- und Markenamt



(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**
102222745 **04.12.2013** **TW**

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Huang Fu, Huang, Fenyuan, Changhua, TW

Die folgenden Angaben sind den vom Anmelder eingereichten Unterlagen entnommen

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

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Canada patent



Office de la Propriété
Intellectuelle
du Canada

Un organisme
d'Industrie Canada

Canadian
Intellectual Property
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An agency of
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)

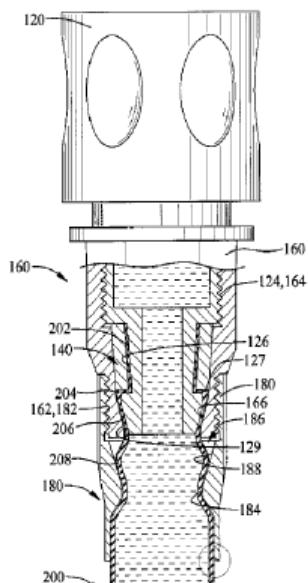
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(74) **Agent:** RICHES, MCKENZIE & HERBERT LLP

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

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



AquaHung

Spain patent



Nº SOLICITUD: U202231862
Nº PUBLICACIÓN: ES1296861
TITULAR/ES:
HUNG TA GARDEN ENTERPRISE CO., LTD.

FECHA EXPEDICIÓN: 19/04/2023

TÍTULO DE MODELO DE UTILIDAD

Cumplidos los requisitos previstos en la vigente Ley 24/2015, de 24 de julio, de Patentes, se expide el presente TÍTULO, acreditativo de la concesión del Modelo de Utilidad.

Se otorga al titular un derecho de exclusiva en todo el territorio nacional, bajo las condiciones y con las limitaciones en la Ley de Patentes. La duración del modelo de utilidad será de diez años contados a partir de la fecha de presentación de la solicitud (10/11/2022).

El modelo de utilidad se concede sin perjuicio de tercero y sin garantía del Estado en cuanto a la validez y a la utilidad del objeto sobre el que recae.

Para mantener en vigor el modelo de utilidad concedido, deberán abonarse las tasas anuales establecidas, a partir de la tercera anualidad. Asimismo, deberá explotarse el objeto de la invención, bien por su titular o por medio de persona autorizada de acuerdo con el sistema de licencias previsto legalmente, dentro del plazo de cuatro años a partir de la fecha de presentación de la solicitud del modelo de utilidad, o de tres años desde la publicación de la concesión en el Boletín Oficial de la Propiedad Industrial, aplicándose el plazo que expire más tarde.



Ana María Redondo Minguez
Jefe/a de Servicio de Actuaciones Administrativas
(P.D. del Director/a del Departamento de Patentes e I.T., Resolución 18 de Julio 2017)

YOUTUBE

◆ YouTube Film introduction

<https://www.youtube.com/watch?v=F97nKgPUvmo>



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

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

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