

The background of the slide is a high-speed photograph of water splashing, creating a dynamic and textured blue surface. In the center, there is a white circular logo. Inside the circle, the word "watergen" is written in a sans-serif font, with "water" in black and "gen" in blue. Above and below the word are two horizontal wavy lines in a light blue color.

**watergen**

Advanced water solutions



# Water-Gen's Mission



Water-gen's mission is to improve the quality of life of people that suffer from poor water sanitation or accessibility to safe drinking water, regardless to their nationality, skin color, or religious belief

# About Water-Gen: Water Solutions



**Wide range of advanced and unique water solution**  
**Pioneer in water from air technology, world record energy efficiency**



**Water From Air**



**Portable Water Purifiers**



**Treatment of air conditioning  
run-off water**



# About Water-Gen: Air Dehumidification



**Water-Gen technologies in this field can significantly decrease energy consumption by smartly using available materials, small-size devices, and highly efficient methods and components**



**Dehumidifiers and A/C**



**Industrial Dehumidification**



**Laundry Dryers**

# Международное признание



Water-Gen was chosen as one of the World's 50 Most Innovative Companies for 2014, ranked #21

*Fast Company Magazine*



Arye Kohavi, Founder and Co-CEO, of Water-Gen, is one of the world's 100 Leading Global Thinkers, and one of the world's top Innovators

*Foreign Policy Magazine*



Technology Innovation Leadership of the Year, 2014

*Frost & Sullivan*



Alongside...



1

Google



14

Apple



GE



Philips

# Water-Gen Business Model



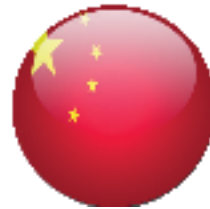
## Business to Government



India



Brazil



China



Mexico



Thailand



Vietnam



Indonesia



Philippines

## Business to Business



## Manufacturing





# Water Technology



Atmospheric Water  
Generation (AWG)





# Water-Gen Water Solutions



## Large Scale

- Outdoor atmospheric water generator
- Up to 6000 L/D



## Gen-350

- Outdoor atmospheric water generator
- Up to 650 L/D



## Genny

- Home atmospheric water generator
- Up to 30 L/D



# GENNY: Advantages



No municipal water or pipes are needed. Only electricity — Plug-and-play

Perfect water quality — almost pure H<sub>2</sub>O. Water is kept sterilized at all times

Low-cost water production due to Water-Gen's unique technology

Clean the room air (Air Purifier)

Dries the room-air for a comfortable feeling (like a Dehumidifier)

*Water  
from Air*

# Large Scale Atmospheric Water Generator



Requiring no infrastructure what so ever but electricity, It is literally a plug and drink solution, aimed for schools, hospitals, commercial / residential buildings, whole villages, factories and off-grid settlements, providing robust and renewable source for fresh, clean drinking water

## Large Scale Advantages

- A single units generates up to 6000 liters of clean fresh water every day
- Water Generation Efficiency: 300Wh/L or \$2/liter
- At world standard conditions (26.7°C and 60% RH)
- Complies with all required standards – World Health Organization (WHO) and Environmental Protection Agency (EPA) standards

## Large Scale Specifications

- Water generation capacity: up to 6000L/day (at world standard conditions)
- Water purification: Unique filtration, Chlorine treatment, and Mineralization
- Power: 3 phase 380V/50Hz
- Power consumption: ~45Kw
- Dimensions: 2.25x2.21x2.85m
- Weight: 2900kg (empty)



# Rooftop Residential Fresh Water System Concept



- An autonomous water supply solution which utilizes the humidity naturally found in the ambient air;
- An average family consumes c. 300–500 liters of water per day. But only 10–20 liters are required to be of high quality, for drinking and cooking;
- Deliver drinking water by gravity directly to kitchen sink via separate water system;
- Perfect water quality.



# GEN-350 Medium Scale Atmospheric Water Generator



## GEN-350 Medium Scale Atmospheric Water Generator

- ▶ GEN-350G: Up to 650 L/Day (at 26.7°C and 60% RH, ~300 Wh/Liter)
- ▶ Electrical requirements: 208/400 VAC, 3-phase, 60/50 Hz
- ▶ Power: 5.8 kW
- ▶ Dimensions (HxWxD): 1.58 m x 1.45 m x 1.45 m

*Awarded the UKMOD  
"Atmospheric Water  
Generation Unit for Operating  
Base CCD" Contract*

*Exhibited in the NATO  
Exercise Capable Logistician  
UKMOD as part of the  
presentation*

# Water Generation Unit —Applications



**Residential Buildings**



**Hospitals**



**Schools**



**Industry**



**Home and Office**



**Rural Areas**

# GENNY - Water From Air For Home And Office

watergen



The GENNY is small water from air generator that provides renewable source of clean and fresh drinking water for homes and offices. Ideal for families, the GENNY provides secured and reliable water source, indifferent to the quality or availability of the municipal water system

## GENNY Advantages

- Generates up to 30 liters of clean fresh water every day
- Plug and drink solution - requiring no infrastructure but electricity
- GENNY generates clean, safe and abundant water source at ~\$2-4/liter or 330Wh/L
- Air purification – as part of the water generation process, the GENNY purifies the room's air, venting clean fresh air – ideal for cities with heavy air pollution
- Dehumidifier – it dries the room air for better thermal comfort (like a Dehumidifier)  
Drier air means less energy invested in A/C
- Complies with all required standards – World Health Organization (WHO) and Environmental Protection Agency (EPA) standards







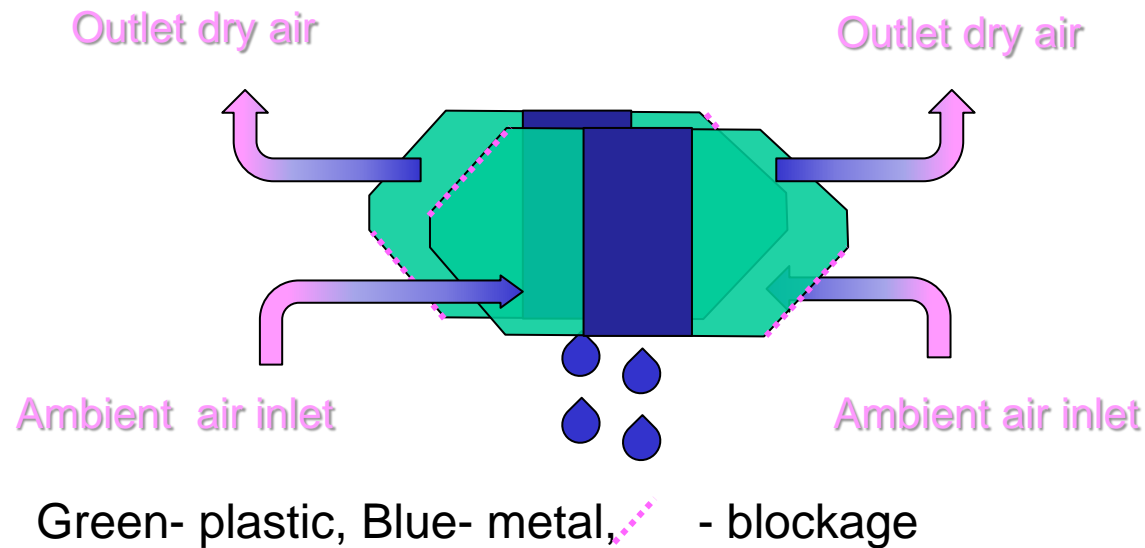
# GENius™ Technology



Energy efficient, heat  
transfer and dehumidifying  
technologies



# GENius™ The Patented Technology



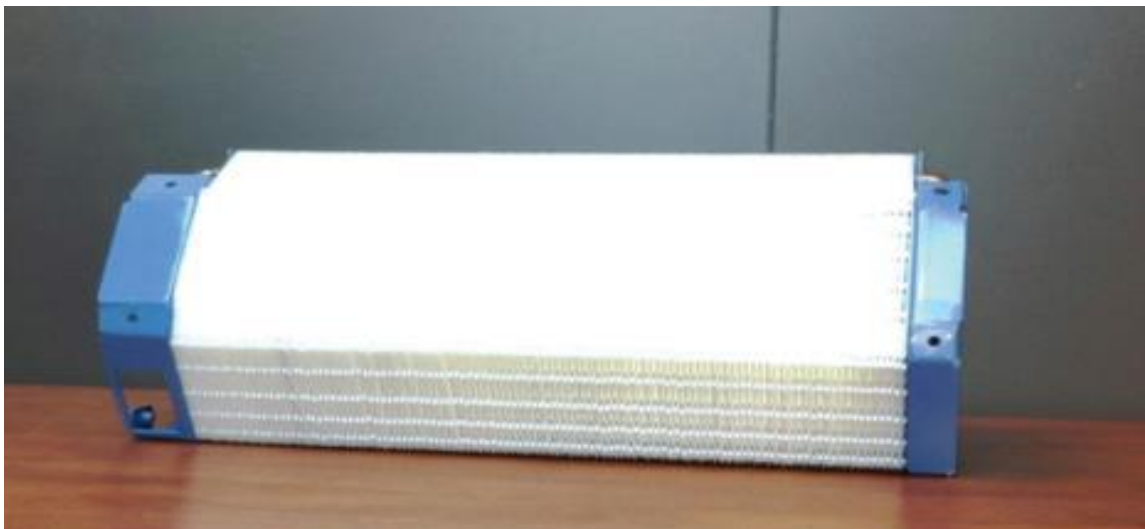
- Composed “leaves” of plastic (or any “thermally low-conductive material”) and an integral evaporator. Each leave allows flow from an opposite direction
- Air-air full counter-flow regime (the optimal method) from 4 directions
- The GENius™ device unique structure allows the incoming air streams to be cooled prior to reaching the evaporator. The result extremely high efficiency (water per electricity)

(12) <b>United States Patent</b> <b>Kohavi et al.</b>	(10) <b>Patent No.:</b> <b>US 9,140,396 B2</b> (45) <b>Date of Patent:</b> <b>Sep. 22, 2015</b>
(54) <b>DEHUMIDIFICATION APPARATUS</b> (71) Applicant: <b>WATER-GEN LTD.,</b> Rishon Le Zion (IL.) (72) Inventors: <b>Arye Kohavi,</b> Neve Monosson (IL.); <b>Sharon Dulberg,</b> Beer-Sheva (IL.) (73) Assignee: <b>WATER-GEN LTD.,</b> Rishon Le Zion (IL.)	5,611,209 A * 3/1997 Ogasawara et al. .... 62/93 6,427,454 B1 * 8/2002 West ..... 62/93 6,478,855 B1 11/2002 Okano ..... 62/93 6,895,774 B1 * 5/2005 Ares et al. .... 62/332 6,944,969 B2 9/2005 Clodic et al. .... 62/271 6,945,065 B2 * 9/2005 Lee et al. .... 62/271 6,973,795 B1 * 12/2005 Moffitt ..... 62/132 7,007,495 B2 * 3/2006 Lee et al. .... 62/271 7,096,684 B2 * 8/2006 Yabu et al. .... 62/271 (Continued)
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 188 days.	<b>FOREIGN PATENT DOCUMENTS</b> EP 0861403 B1 2/2003 EP 2576888 B1 3/2014 (Continued)
(21) Appl. No.: <b>13/034,857</b>	<b>OTHER PUBLICATIONS</b>
(22) Filed: <b>Mar. 15, 2013</b>	International Application # PCT/IB2014/059620 Search Report dated Jul. 1, 2014.
(65) <b>Prior Publication Data</b> US 2014/0261764 A1 Sep. 18, 2014	(Continued)
(51) <b>Int. Cl.</b> <b>F16L 53/00</b> (2006.01)	<i>Primary Examiner</i> — Mohammad M Ali (74) <i>Attorney, Agent, or Firm</i> — D. Kligler I.P. Services Ltd.
(52) <b>U.S. Cl.</b> CPC ..... <b>F16L 53/00</b> (2013.01); <b>F10T 137/6579</b> (2015.04)	(57) <b>ABSTRACT</b>
(58) <b>Field of Classification Search</b> CPC ..... F16L 53/00; F16L 53/001; F16L 53/002; F16L 53/004; F25D 17/06; F25D 21/00; F25D 21/14; F24F 3/14 USPC ..... 62/93, 271, 272, 324.5; 137/340 See application file for complete search history.	Dehumidification apparatus including a cooled core coupled to an external cooling source, at least first and second relatively humid air inlet pathways leading to the cooled core and at least first and second relatively dry air outlet pathways leading from the cooled core, the outlet pathways being in heat exchange proximity with the inlet pathways whereby relatively humid air in the inlet pathways is precooled upstream of the cooled core and relatively dry air in the outlet pathways is heated downstream of the cooled core, the cooled core defining a multiplicity of mutually adjacent cooling pathways extending therethrough which are each coupled to one of the inlet pathways and to one of the outlet pathways such that air passes through adjacent ones of the mutually adjacent cooling pathways in mutually different directions.
(56) <b>References Cited</b> <b>U.S. PATENT DOCUMENTS</b> 4,154,003 A 5/1979 Muller 4,326,344 A 4/1982 Smith 4,475,589 A * 10/1984 Mizuno et al. .... 165/166 4,609,039 A 9/1986 Fushiki et al.	<b>20 Claims, 18 Drawing Sheets</b>

# GENius™ Advantages



- A unique Water from Air device operating in world record breaking an efficient energy consumption of ~300 Wh/Liter (Energy Factor of 3.34)
- Can be easily scaled up or down to any size required. Each 1/2 a meter can produces about 2 Liters/Hour at 26.7° C and 60% RH
- The GENius™ technology produces much more water per size
- Small size. Can replace other heat exchangers currently installed
- Low-cost structural materials

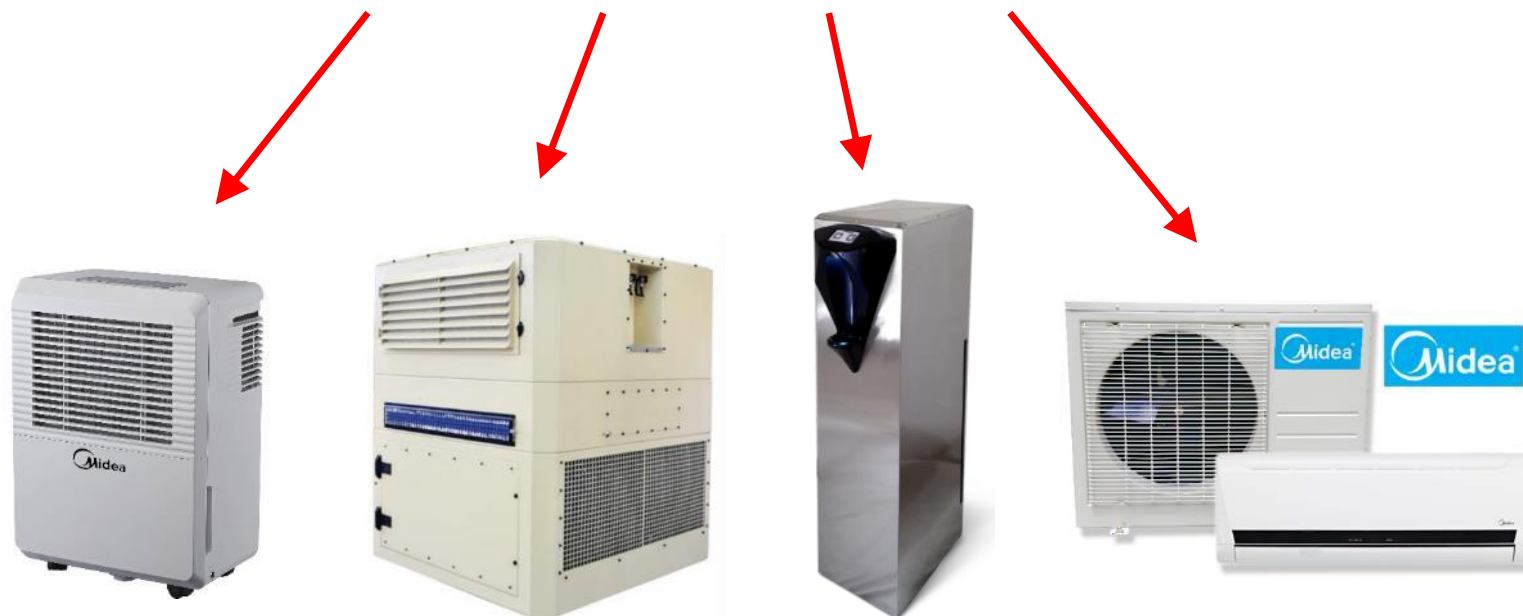


GENius™ is the most efficient  
worldwide dehumidification device  
from the point of view of  
efficiency- size - cost



# Global Manufacturing

GENius core module powers a variety of systems and applications



Candidate countries for mass production





# Air Dehumidification



# Residential Dehumidifiers: Current Energy Star



**The American Environmental Protection Agency (EPA) Energy Star to dehumidifiers :**

540 Watt-hour/Liter (Energy factor of 1.85)  
at conditions of 80°F and 60% Relative Humidity

**Water-Gen GENius technology :**

295 Watt-hour/Liter (energy factor of 3.38)



**Conclusion:** Water-Gen's GENius technology is 2X more efficient than the current EPA-backed Energy Star



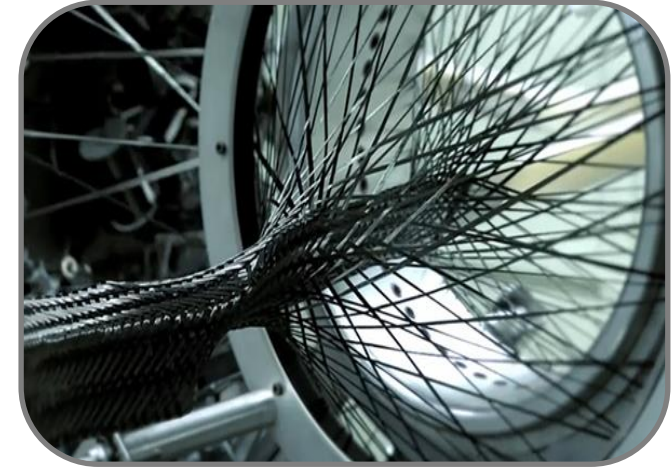
# Industrial Dehumidification



**Food Industry**



**Military**



**Commercial App**



**Pharma**



**Electronics**



**Dry Storage**



# The Spring



# Spring – Portable Water Purifier



- Asolo and unique portable water purifier in the world powered by rechargeable battery
- Portable, lightweight, non-saline, water purifier for maneuvering ground forces
- Developed for the Israeli MOD in accordance to strict field requirements and military standards
- Facilitates highlevel water purification, both biological and chemical
- Operated by a standard issue army battery Delivering
- 250 liters per one battery Weighs 12 kg





# Spring Used in Different Applications



*IDF Special Forces Field Tests*



*Operational Mode*



*Italian Landing Forces Exercise*



*IDF Rescue and Relief at  
Typhoon Haiyan*

# Water-Gen's Solution – Civilian Spring



- A mobile water purification unit which is operated on rechargeable and sustained power sources
- Designated for locations with no electrical power nor running water Several
- filtration elements in a multi-barrier principle that delivers  
~120 Liters/Hour, up to 1,200 Liters/Day treatment of any contaminated non-saline water, including microorganisms, pesticides and heavy metals
- Automatic validation of water quality  
(auto-shut-off in case of poor water quality)
- Standards: EPA, WHO, Local standards



**Thank You!**

