US0D1045064S

(12) United States Design Patent

Glenn, Jr.

(10) Patent No.: US D1,045,064 S
(45) Date of Patent: ** Oct. 1, 2024

(54) **SINGLE-DOSE DISSOLVABLE PERSONAL CARE UNIT**

(71) Applicant: **The Procter & Gamble Company**, Cincinnati, OH (US)

(72) Inventor: **Robert Wayne Glenn, Jr.**, Singapore (SG)

(73) Assignee: **The Procter & Gamble Company**, Cincinnati, OH (US)

(**) Term: **15 Years**

(21) Appl. No.: **29/795,025**

(22) Filed: **Jun. 16, 2021**

(30) **Foreign Application Priority Data**

Dec. 17, 2020 (WO) WIPO100299

(51) **LOC (14) Cl.** **24-01**

(52) **U.S. Cl.**
USPC **D24/102**

(58) **Field of Classification Search**
USPC D24/100–104; D1/115, 122
CPC A61K 9/4808; A23K 50/40
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,356,168	A		8/1944	Mabley
2,396,278	A		3/1946	Otto
2,438,091	A		3/1948	Lynch
2,486,921	A		11/1949	Byerly
2,486,922	A		11/1949	Bruce
2,528,378	A		10/1950	Mannheimer
D167,583	S	*	8/1952	Peters D1/115
2,613,185	A		10/1952	Marshall
2,658,072	A		11/1953	Milton
2,694,668	A		11/1954	Fricke
2,809,971	A		10/1957	Jack et al.
D189,123	S	*	11/1960	Brandt et al. D1/115
3,152,046	A		10/1964	Maria
D201,594	S		7/1965	Woodard
3,236,733	A		2/1966	Karsten et al.
3,321,425	A		5/1967	Karl-ludwig et al.
3,332,880	A		7/1967	Kessler et al.
D210,355	S		3/1968	Lay
3,426,440	A		2/1969	Shen et al.
3,428,478	A		2/1969	Donaldson et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CA	169627	S	5/2018
CN	1138091	A	12/1996

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 29/795,031, filed Jun. 16, 2021, Robert Wayne Glenn et al.

(Continued)

Primary Examiner — Charles D Hanson
(74) *Attorney, Agent, or Firm* — Alexandra S. Anoff

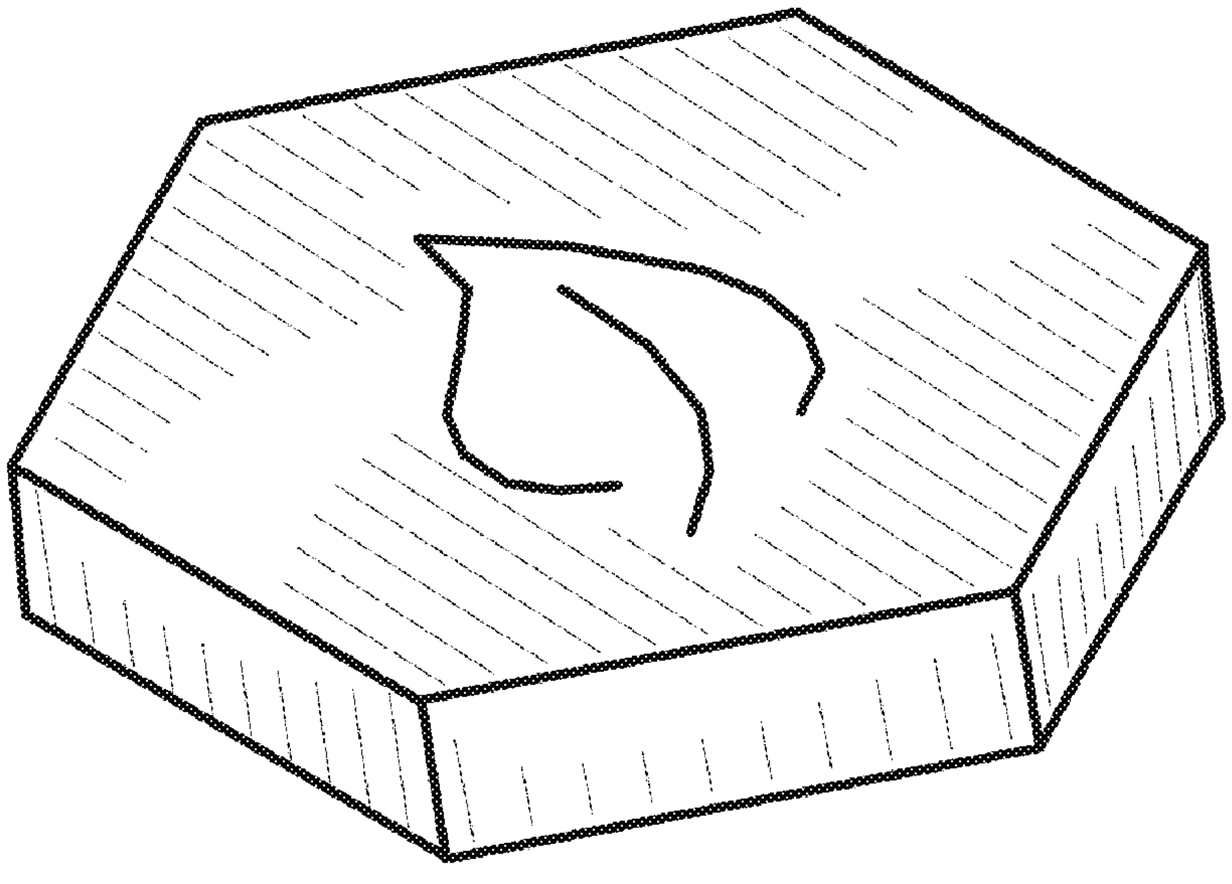
(57) **CLAIM**

The ornamental design for single-dose dissolvable personal care unit, as shown and described.

DESCRIPTION

FIG. **1** is a perspective view of a first embodiment of single-dose dissolvable personal care unit embodying our new design;
FIG. **2** is a front view thereof;
FIG. **3** is a back view thereof;
FIG. **4** is a top view thereof;
FIG. **5** is a bottom view thereof;
FIG. **6** is a left view thereof; and,
FIG. **7** is a right view thereof.

1 Claim, 7 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

3,463,308	A		8/1969	Deneke
3,489,688	A		1/1970	Pospischil
3,653,383	A		4/1972	Wise
3,695,989	A		10/1972	Albert
3,753,196	A		8/1973	Kurtz et al.
3,761,418	A		9/1973	Parran
3,929,678	A		12/1975	Laughlin
3,967,921	A		7/1976	Haberli et al.
4,020,156	A		4/1977	Murray et al.
4,051,081	A		9/1977	Jabs et al.
4,089,945	A		5/1978	Brinkman et al.
D248,543	S		7/1978	Strelcheck
4,149,551	A		4/1979	Benjamin et al.
4,185,125	A		1/1980	Kimura et al.
4,196,190	A		4/1980	Gehman et al.
4,197,865	A		4/1980	Jacquet et al.
4,206,196	A		6/1980	Davis
4,217,914	A		8/1980	Jacquet et al.
4,272,511	A		6/1981	Papantoniou et al.
D260,691	S		9/1981	Hines
4,323,683	A		4/1982	Bolich, Jr. et al.
4,345,080	A		8/1982	Bolich, Jr.
D266,829	S		11/1982	Yoshizawa et al.
4,379,753	A		4/1983	Bolich, Jr.
4,381,919	A		5/1983	Jacquet et al.
4,422,853	A		12/1983	Jacquet et al.
4,470,982	A		9/1984	Winkler
4,507,280	A		3/1985	Pohl et al.
4,529,586	A		7/1985	De et al.
4,536,361	A		8/1985	Torobin
4,565,647	A		1/1986	Llenado
D286,450	S		10/1986	Tovey
4,635,351	A		1/1987	Koch et al.
4,663,158	A		5/1987	Wolfram et al.
4,710,374	A		12/1987	Grollier et al.
4,727,410	A		2/1988	Higgins, III
4,822,613	A		4/1989	Rodero
4,885,107	A		12/1989	Wetzel
4,976,953	A		12/1990	Orr et al.
4,990,280	A		2/1991	Thorengaard
5,055,384	A		10/1991	Kuehnert
5,061,481	A		10/1991	Suzuki et al.
5,062,889	A		11/1991	Hoehl et al.
5,062,994	A		11/1991	Imperatori
5,083,699	A		1/1992	Bulcher
5,094,853	A		3/1992	Hagarty
5,098,636	A		3/1992	Balk
5,100,657	A		3/1992	Ansher-Jackson et al.
5,100,658	A		3/1992	Bolich, Jr. et al.
5,102,129	A		4/1992	Roberts
5,104,646	A		4/1992	Bolich, Jr.
5,106,609	A		4/1992	Bolich, Jr.
5,166,276	A		11/1992	Hayama et al.
D334,420	S		3/1993	Copeland et al.
5,216,203	A		6/1993	Gower
5,220,033	A		6/1993	Kamei et al.
5,261,426	A		11/1993	Kellett et al.
5,280,079	A		1/1994	Allen et al.
D344,023	S		2/1994	Eisman
RE34,584	E		4/1994	Grote et al.
D349,976	S		8/1994	Connell
D351,345	S		10/1994	Geho
5,391,368	A		2/1995	Gerstein
D357,115	S		4/1995	Ashley et al.
5,409,703	A		4/1995	McAnalley et al.
D358,025	S		5/1995	Martin et al.
5,415,810	A		5/1995	Lee
5,429,628	A		7/1995	Trinh et al.
5,455,114	A		10/1995	Ohmory
5,457,895	A		10/1995	Thompson et al.
5,458,433	A		10/1995	Stastny
D364,491	S		11/1995	Bradfield et al.
5,476,597	A		12/1995	Sakata et al.
5,501,238	A		3/1996	Borstel et al.
5,533,636	A		7/1996	Reiker
5,580,481	A		12/1996	Sakata et al.
5,582,786	A		12/1996	Brunskill et al.
D377,580	S		1/1997	Hayes et al.
D378,180	S		2/1997	Hayes
D380,826	S		7/1997	Sybilensky
5,660,845	A		8/1997	Trinh et al.
D384,438	S		9/1997	Hage
5,672,576	A		9/1997	Behrens et al.
D385,186	S		10/1997	Fildan
5,673,576	A		10/1997	Chen et al.
5,674,478	A		10/1997	Dodd
D388,235	S	*	12/1997	Wilson D1/115
5,750,122	A		5/1998	Evans
5,780,047	A		7/1998	Kamiya et al.
D398,847	S		9/1998	Wyslotsky
D399,260	S		10/1998	Thimote
D407,640	S		4/1999	Crapser et al.
D408,223	S		4/1999	Henry
5,911,224	A		6/1999	Berger
5,925,603	A		7/1999	D, Angelo
5,932,514	A		8/1999	Ernst
5,955,419	A		9/1999	Barket, Jr. et al.
D416,103	S		11/1999	Hashmi
D417,253	S		11/1999	Addonizio
5,976,454	A		11/1999	Sterzel et al.
D418,415	S		1/2000	Hayes
D418,750	S		1/2000	Blin
6,010,719	A		1/2000	Remon et al.
6,029,808	A		2/2000	Peck et al.
6,034,043	A		3/2000	Fujiwara
D427,902	S		7/2000	Hayes
6,106,849	A		8/2000	Malkan et al.
D432,868	S		10/2000	Tan
6,177,391	B1		1/2001	Zafar
6,200,949	B1		3/2001	Reijmer et al.
D441,869	S		5/2001	Bloor et al.
D442,353	S		5/2001	Macias
D442,739	S		5/2001	Friesenhahn
D443,389	S		6/2001	Friesenhahn
D445,674	S		7/2001	Pritchett
D445,675	S		7/2001	Richardson
D448,802	S		10/2001	Lariviere, Jr. et al.
D449,881	S	*	10/2001	Mock, Sr. D24/101
D450,378	S		11/2001	Minakuchi et al.
6,365,142	B1		4/2002	Tamura
D461,102	S		8/2002	Suzuki
D462,900	S		9/2002	Yamada et al.
D464,486	S		10/2002	Vasudeva
6,458,754	B1		10/2002	Velazquez et al.
D465,303	S		11/2002	Friesenhahn
6,503,521	B1		1/2003	Atis et al.
6,525,034	B2		2/2003	Dalrymple et al.
D476,854	S		7/2003	Garraway
D479,561	S		9/2003	Meyer
D484,749	S		1/2004	Garraway
D485,643	S		1/2004	McLeish
D489,162	S		5/2004	Dings-plooij
D493,105	S		7/2004	Childs et al.
6,790,814	B1		9/2004	Marin
D497,437	S		10/2004	Poliacek et al.
6,800,295	B2		10/2004	Fox
6,808,375	B2		10/2004	Kloetzer
6,825,161	B2		11/2004	Shefer et al.
6,831,046	B2		12/2004	Carew et al.
6,846,784	B2		1/2005	Engel et al.
D502,123	S		2/2005	Wilson
6,878,368	B2		4/2005	Ohta
D509,641	S	*	9/2005	Kerdoon D1/115
D509,935	S		9/2005	Burt
6,943,200	B1		9/2005	Corrand et al.
D510,173	S	*	10/2005	Richey D1/127
D510,174	S	*	10/2005	Richey D1/127
D515,915	S		2/2006	Karim
D517,410	S		3/2006	Grant
7,015,181	B2		3/2006	Lambino
D520,185	S		5/2006	Zeng et al.
D525,879	S		8/2006	Ueda et al.
D526,885	S		8/2006	Kelleghan
D535,196	S		1/2007	Ueda et al.

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,208,460	B2		4/2007	Shefer et al.
D549,051	S		8/2007	Nordwall
D551,908	S		10/2007	Friedland et al.
7,285,520	B2		10/2007	Krzysik
7,387,787	B2		6/2008	Fox
D576,753	S		9/2008	Mukai
D577,332	S		9/2008	Moore
D578,010	S		10/2008	Friedland et al.
D578,877	S		10/2008	Lovett
D578,878	S		10/2008	Friedland et al.
D578,881	S		10/2008	Friedland
D588,332	S		3/2009	Phelan
D601,856	S		10/2009	Pancza
D605,527	S		12/2009	Kerr et al.
D619,888	S		7/2010	Domingues et al.
7,832,552	B2		11/2010	Newman
7,846,462	B2		12/2010	Spadini et al.
D632,386	S	*	2/2011	Chang D24/101
7,892,992	B2		2/2011	Kamada et al.
7,901,696	B2		3/2011	Eknoian et al.
D637,073	S		5/2011	Morcos
D640,921	S		7/2011	Caldwell
D644,541	S		9/2011	Schrader et al.
D651,096	S		12/2011	Nakagiri
8,197,830	B2		6/2012	Helfman et al.
8,268,764	B2		9/2012	Glenn, Jr. et al.
8,273,333	B2		9/2012	Glenn, Jr
8,288,332	B2		10/2012	Fossum et al.
8,309,505	B2		11/2012	Fossum et al.
8,349,341	B2		1/2013	Glenn, Jr. et al.
8,349,786	B2		1/2013	Glenn, Jr. et al.
8,349,787	B2		1/2013	Glenn, Jr. et al.
8,357,728	B2		1/2013	Butler et al.
D677,579	S		3/2013	Monahan
D680,882	S		4/2013	Logue
8,415,287	B2		4/2013	Glenn, Jr. et al.
D682,622	S		5/2013	Keys
D682,671	S		5/2013	Gottschalk
D683,619	S		6/2013	Lamb et al.
D683,620	S		6/2013	Lamb et al.
8,461,090	B2		6/2013	Glenn, Jr. et al.
8,461,091	B2		6/2013	Glenn, Jr.
8,466,099	B2		6/2013	Glenn, Jr. et al.
D685,436	S		7/2013	Menting
D686,913	S		7/2013	Kirk et al.
8,476,211	B2		7/2013	Glenn, Jr. et al.
8,546,640	B2		10/2013	Popovsky et al.
D694,621	S		12/2013	McCarthy
D695,103	S		12/2013	Kirk et al.
8,723,333	B2		5/2014	Park
8,765,170	B2		7/2014	Glenn, Jr.
D712,159	S		9/2014	Clerici et al.
D712,822	S		9/2014	Brusaw et al.
D713,259	S		9/2014	Naef et al.
D726,534	S		4/2015	Lo et al.
9,062,186	B2		6/2015	Longdon et al.
D737,691	S		9/2015	Abbott et al.
D739,227	S		9/2015	Mitchell et al.
D740,928	S		10/2015	Bruining et al.
D742,663	S		11/2015	Williams et al.
D744,635	S	*	12/2015	Chang D24/102
9,198,838	B2		12/2015	Glenn, Jr.
D748,240	S	*	1/2016	Goode D24/101
D748,241	S	*	1/2016	Goode D24/102
D769,522	S		10/2016	Venet
D771,788	S		11/2016	Duckwitz
D774,086	S		12/2016	Montes et al.
D775,198	S		12/2016	Montes et al.
9,539,444	B2		1/2017	Kinoshita
D778,026	S		2/2017	Roetheli
D781,157	S		3/2017	Sowden
D782,646	S	*	3/2017	Goode D24/102
D783,799	S	*	4/2017	Goode D24/102
D783,800	S	*	4/2017	Goode D24/102
D783,801	S	*	4/2017	Goode D24/102
D793,025	S		8/2017	Slusarczyk et al.
D797,551	S		9/2017	Chatterton
D798,143	S		9/2017	Chatterton
D800,545	S		10/2017	Burton
D801,802	S		11/2017	Loritz
D808,583	S		1/2018	Zietek
D811,922	S		3/2018	Lefave
D811,935	S		3/2018	Hughes
D819,836	S		6/2018	Noël
D848,102	S		5/2019	Carlson et al.
D850,041	S		5/2019	Endle
10,294,586	B2		5/2019	Sivik et al.
D851,344	S		6/2019	Carlson et al.
D857,156	S		8/2019	Hani
D857,242	S		8/2019	Darrow et al.
D857,929	S		8/2019	Darrow et al.
D858,308	S		9/2019	Vega et al.
D859,533	S		9/2019	Landi, Jr.
D862,020	S		10/2019	Gorrell et al.
D862,218	S		10/2019	Giwani
D863,600	S		10/2019	Chao
D864,507	S		10/2019	Stoughton et al.
D866,105	S		11/2019	Carlson et al.
D866,891	S		11/2019	Carlson et al.
D866,892	S		11/2019	Hunt et al.
D866,893	S		11/2019	Hunt et al.
D867,717	S		11/2019	Chavez
D867,872	S		11/2019	Labontéet al.
D868,159	S		11/2019	Swisher et al.
D868,953	S		12/2019	McKendree
D875,518	S		2/2020	Giwani
10,569,286	B2		2/2020	Anderson et al.
D878,694	S		3/2020	Carlson et al.
D885,911	S		6/2020	Silva
D885,912	S		6/2020	Silva
10,694,917	B2		6/2020	Dreher et al.
D895,429	S		9/2020	Foote
D896,067	S		9/2020	Giwani
D900,234	S		10/2020	MacDonald et al.
D901,115	S		11/2020	Carlson et al.
D901,307	S		11/2020	Ha
D903,152	S		11/2020	Chao
D905,975	S		12/2020	Svihilik
D906,802	S		1/2021	Chi
D910,434	S		2/2021	Tan et al.
D910,457	S		2/2021	Lee
D921,166	S		6/2021	Meyers
D922,694	S		6/2021	Huang
D933,095	S		10/2021	Heiner et al.
D934,065	S		10/2021	Purkey et al.
D936,354	S		11/2021	Margetis
D938,132	S		12/2021	Mark
D939,359	S		12/2021	Washington et al.
D939,965	S		1/2022	Haazen
D942,111	S		2/2022	De Boer
D943,200	S		2/2022	Gerhards
D944,030	S		2/2022	Wright et al.
11,236,293	B2		2/2022	Ellson et al.
D946,415	S		3/2022	Puyguiraud
D948,346	S		4/2022	Collier et al.
D948,836	S		4/2022	De Boer
D949,006	S		4/2022	Albert
D953,886	S		6/2022	Collier et al.
D959,052	S		7/2022	Gerhards et al.
D959,283	S		8/2022	Guenther
D959,284	S		8/2022	Burmeister et al.
D962,050	S		8/2022	Cook et al.
D964,162	S		9/2022	Jensen
D966,088	S		10/2022	Cook et al.
D966,089	S		10/2022	Cook et al.
D974,169	S		1/2023	Duncan
D978,662	S		2/2023	Plasencia et al.
D980,060	S		3/2023	Tan
D1,007,328	S		12/2023	Washington
2002/0077264	A1		6/2002	Roberts et al.
2002/0081930	A1		6/2002	Jackson et al.
2002/0098994	A1		7/2002	Zafar
2002/0099109	A1		7/2002	Dufton et al.
2002/0177621	A1		11/2002	Hanada et al.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2002/0187181	A1	12/2002	Godbey et al.
2003/0018242	A1	1/2003	Hursh et al.
2003/0032573	A1	2/2003	Tanner et al.
2003/0045441	A1	3/2003	Hsu et al.
2003/0069154	A1	4/2003	Hsu et al.
2003/0080150	A1	5/2003	Cowan
2003/0099691	A1	5/2003	Lydzinski et al.
2003/0099692	A1	5/2003	Lydzinski et al.
2003/0141662	A1	7/2003	Kost et al.
2003/0155276	A1	8/2003	Gaffney et al.
2003/0180242	A1	9/2003	Eccard et al.
2003/0186826	A1	10/2003	Eccard et al.
2003/0194416	A1	10/2003	Shefer
2003/0199412	A1	10/2003	Gupta
2003/0209166	A1	11/2003	Vanmaele et al.
2003/0215522	A1	11/2003	Johnson et al.
2003/0232183	A1	12/2003	Dufton
2004/0029762	A1	2/2004	Hensley
2004/0032859	A1	2/2004	Miao
2004/0048759	A1	3/2004	Ribble et al.
2004/0048771	A1	3/2004	McDermott
2004/0053808	A1	3/2004	Raehse et al.
2004/0059055	A1	3/2004	Inada
2004/0071742	A1	4/2004	Popplewell
2004/0071755	A1	4/2004	Fox
2004/0108615	A1	6/2004	Foley
2004/0110656	A1	6/2004	Casey et al.
2004/0126585	A1	7/2004	Kerins et al.
2004/0175404	A1	9/2004	Shefer
2004/0180597	A1	9/2004	Kamada
2004/0202632	A1	10/2004	Gott et al.
2004/0206270	A1	10/2004	Vanmaele et al.
2004/0242097	A1	12/2004	Hasenoehrl
2004/0242772	A1	12/2004	Huth et al.
2005/0069575	A1	3/2005	Fox
2005/0136780	A1	6/2005	Clark et al.
2005/0137272	A1	6/2005	Gaserod
2005/0159730	A1	7/2005	Kathrani et al.
2005/0202992	A1	9/2005	Grandio et al.
2005/0220745	A1	10/2005	Lu
2005/0232954	A1	10/2005	Yoshinari et al.
2005/0272836	A1	12/2005	Yaginuma et al.
2005/0287106	A1	12/2005	Legendre
2006/0002880	A1	1/2006	Peffly et al.
2006/0013869	A1	1/2006	Ignatious
2006/0052263	A1	3/2006	Roreger et al.
2006/0064510	A1	3/2006	Low et al.
2006/0078528	A1	4/2006	Yang et al.
2006/0078529	A1	4/2006	Uchida et al.
2006/0128592	A1	6/2006	Ross
2006/0159730	A1	7/2006	Simon
2006/0228319	A1	10/2006	Vona et al.
2006/0274263	A1	12/2006	Yacktman et al.
2007/0028939	A1	2/2007	Mareri et al.
2007/0099813	A1	5/2007	Luizzi
2007/0110792	A9	5/2007	Simon
2007/0135528	A1	6/2007	Butler et al.
2007/0149435	A1	6/2007	Koenig et al.
2007/0225388	A1	9/2007	Cooper et al.
2008/0019935	A1	1/2008	Khan
2008/0035174	A1	2/2008	Aubrun-sonneville
2008/0083420	A1	4/2008	Glenn et al.
2008/0090939	A1	4/2008	Netravali et al.
2008/0131695	A1	6/2008	Aouad et al.
2008/0138492	A1	6/2008	Cingotti
2008/0152894	A1	6/2008	Beihoffer et al.
2008/0153730	A1	6/2008	Tsaur
2008/0215023	A1	9/2008	Scavone et al.
2008/0276178	A1	11/2008	Fadell et al.
2008/0292669	A1	11/2008	Deng et al.
2008/0293839	A1	11/2008	Stobby
2009/0197787	A1	8/2009	Venet et al.
2009/0232873	A1	9/2009	Glenn, Jr. et al.
2009/0263342	A1	10/2009	Glenn, Jr.
2010/0018641	A1	1/2010	Branham
2010/0150976	A1	6/2010	Schnitzler
2010/0167971	A1	7/2010	Glenn, Jr. et al.
2010/0173817	A1	7/2010	Glenn, Jr. et al.
2010/0229773	A1	9/2010	Droese
2010/0286011	A1	11/2010	Glenn, Jr. et al.
2010/0291165	A1	11/2010	Glenn, Jr. et al.
2011/0023240	A1	2/2011	Fossum
2011/0027328	A1	2/2011	Baig et al.
2011/0028374	A1	2/2011	Fossum et al.
2011/0033509	A1	2/2011	Simon
2011/0165110	A1	7/2011	Kinoshita et al.
2011/0182956	A1	7/2011	Glenn, Jr. et al.
2011/0189247	A1	8/2011	Glenn, Jr.
2011/0195098	A1	8/2011	Glenn, Jr
2011/0250256	A1	10/2011	Hyun-oh et al.
2011/0287687	A1	11/2011	Kramer et al.
2012/0021026	A1	1/2012	Glenn, Jr.
2012/0052036	A1	3/2012	Glenn, Jr.
2012/0052037	A1	3/2012	Sivik et al.
2012/0107534	A1	5/2012	Wnuk et al.
2012/0237576	A1	9/2012	Gordon
2012/0270029	A1	10/2012	Glenn, Jr. et al.
2012/0294823	A1	11/2012	Aramwit
2012/0321580	A1	12/2012	Glenn, Jr.
2013/0236520	A1	9/2013	Popovsky et al.
2013/0303419	A1	11/2013	Glenn, Jr. et al.
2014/0271744	A1	9/2014	Glenn, Jr. et al.
2014/0329428	A1	11/2014	Glenn, Jr.
2015/0102307	A1	4/2015	Tajima et al.
2015/0297494	A1	10/2015	Mao
2015/0313803	A1	11/2015	Lynch et al.
2015/0313804	A1	11/2015	Lynch et al.
2015/0313805	A1	11/2015	Lynch et al.
2015/0313806	A1	11/2015	Lynch et al.
2015/0313807	A1	11/2015	Lynch et al.
2015/0313808	A1	11/2015	Lynch et al.
2015/0313809	A1	11/2015	Lynch et al.
2015/0315350	A1	11/2015	Mao et al.
2016/0101026	A1	4/2016	Pratt
2016/0101204	A1	4/2016	Lynch
2016/0143827	A1	5/2016	Castan Barberan et al.
2016/0250109	A1	9/2016	Dreher et al.
2016/0367104	A1	12/2016	Dreher et al.
2017/0121641	A1	5/2017	Smith
2017/0129678	A1	5/2017	Burton
2017/0335080	A1	11/2017	Mao et al.
2018/0140469	A1	5/2018	Kane et al.
2018/0311135	A1	11/2018	Chang et al.
2018/0333339	A1	11/2018	Hamersky
2018/0334644	A1	11/2018	Hamersky et al.
2019/0015875	A1	1/2019	Gardner, Jr. et al.
2019/0183243	A1	6/2019	Brügmann
2019/0282457	A1	9/2019	Pratt
2019/0282461	A1	9/2019	Glassmeyer
2019/0350819	A1	11/2019	Hamersky et al.
2020/0093710	A1	3/2020	Hamersky
2020/0214946	A1	7/2020	Chan et al.
2020/0308360	A1	10/2020	Mao et al.
2020/0405587	A1	12/2020	Song
2021/0000733	A1	1/2021	Hilvert
2021/0094744	A1	4/2021	Benson et al.
2021/0107263	A1	4/2021	Bartolucci et al.
2021/0128415	A1	5/2021	Stern et al.
2021/0147763	A1	5/2021	Tan et al.
2021/0401677	A1	12/2021	Song

FOREIGN PATENT DOCUMENTS

CN	1219388	A	6/1999
CN	1268558	A	10/2000
CN	1357613	A	7/2002
CN	1530431	A	9/2004
CN	1583991	A	2/2005
CN	3648760		5/2007
CN	301666535		9/2011
CN	104040061	A	9/2014
CN	304115833		4/2017
CN	106726634	A	5/2017
CN	106728634	A	5/2017

(56) **References Cited**

FOREIGN PATENT DOCUMENTS

CN	304537587		3/2018
DE	19607851	A1	9/1997
DE	10331767	A1	2/2005
EP	609808	A1	8/1994
EP	0858828	A1	8/1998
EP	1217987	B1	12/2004
EP	1160311	B1	3/2006
EP	1637190	A1	3/2006
EP	1958532	A2	8/2008
EP	2085434	A1	8/2009
EP	1317916	B1	10/2010
FR	2886845	A1	12/2006
GB	2235204	A	2/1991
GB	2355008	A	4/2001
JP	58021608		2/1983
JP	S58216109	A	12/1983
JP	S6272609	A	4/1987
JP	S6272610	A	4/1987
JP	S6281432	A	4/1987
JP	H01172319	A	7/1989
JP	H01313418	A	12/1989
JP	H0275650	A	3/1990
JP	H05344873	A	12/1993
JP	H0617083	A	1/1994
JP	H0753349	A	2/1995
JP	H0789852	A	4/1995
JP	H08325133	A	12/1996
JP	H10251371	A	9/1998
JP	2000053998	A	2/2000
JP	2003073700	A	3/2003
JP	2003082397	A	3/2003
JP	2004256799	A	9/2004
JP	2004345983	A	12/2004
JP	2005171063	A	6/2005
JP	2007091954	A	4/2007
JP	2007197540	A	8/2007
KR	20020003442	A	1/2002
WO	8301943	A1	6/1983
WO	9514495	A1	6/1995
WO	0119948	A1	3/2001
WO	0125393	A1	4/2001
WO	200125322	A1	4/2001
WO	2001024770	A1	4/2001
WO	2001054667	A1	8/2001
WO	0238722	A2	5/2002
WO	2004032859	A1	4/2004
WO	2004041991	A1	5/2004
WO	2005003423	A1	1/2005
WO	2005070374	A1	8/2005
WO	2005075547	A1	8/2005
WO	2007033598	A1	3/2007
WO	2007093558	A1	8/2007
WO	2009019571	A2	2/2009
WO	2009095891	A1	8/2009
WO	2010077627	A2	7/2010
WO	2010085569	A1	7/2010
WO	2012120199	A1	9/2012
WO	DM100932		4/2018
WO	DM100938		4/2018
WO	DM101063		5/2018
WO	DM101100		5/2018
WO	DM101101		5/2018
WO	2019001940	A1	1/2019

OTHER PUBLICATIONS

"Cardinal Health", URL Link: http://spd.cardinal.com/, No Known Date.

"Cima Labs", URL Link: http://www.cimalabs.com/, No Known Date.

"Dissolving Soap Strips", Ranir, URL: www.ranir.com, No Known Date.

"Encyclopedia of Polymer Science and Engineering", vol. 15, 2nd ed., Silicones, year 1989, pp. 204-308.

"Find the Right Hang Tab for Your Product," Do-It Corporation, Hang Tabs by Do-It Corporation, Retrieved from http://www.do-it.com/products/hang-tabs, dated Oct. 25, 2021, 5 pages.

"Hexagon 4 ward soap mold, Soap, Cosmetics, New Silicon mold", Retrieved From http://candle-box.com/product/%EC%9C%A1%EA%B0%81-4%EA%B5%AC-%EB%B9%84%EB%88%84%EB%AA%B0 %EB%93%9C/2206/?page_4=3#none, Sep. 10, 2019, 16 pages.

"M.K. Industries", URL link: http://www.soapstrips.com, No known date.

"MOVA Pharmaceutical and Kosmos", URL Link: http://www.icon-pr.com/news/news/prinl.cfm?inv_id=256-1, No known date.

"Product Review: Gemz Solid Shampoo", Travel As Much.Com, published on Mar. 19, 2019, retrieved on Apr. 27, 2021, retrieved from the Internet URL: https://travelasmuch.com/gemz-solid-shampoo-review/, 14 pages.

"Pure Soap Leafz", Soap UNLTD. Netherlands, URL: http://www.upandunder.com.uk/eshop/catalogue/testbs.asp?Manufacturer_ID=252;Activity_ID=33;Description_ID=157), No Known Date.

"Sanipro Sanitary Products", URL Link: http://www.sanipro.iit, No known date.

"Solublon (Toyohashi Japan", URL Link: http://www.solublon.com, No known date.

"SPI Pharma", URL Link: http://www.spipharma.com, No known date.

"Travelers Passport Paper Soap Sheets", URL Link: http://www.weddingflavornow.com/index.asp?PageAction=VIEWPROD&ProdID=510, No known date.

"Wenda", URL Link: http://www.wenda.com. No known date.

Adhesives Research Pennsylvania, URL Link: http://12.4.33.51/news/apresmed.htm, No Known Date.

All Office Actions; U.S. Appl. No. 29/672,822, filed Dec. 10, 2018.

All Office Actions; U.S. Appl. No. 29/707,809, filed Oct. 1, 2019.

Amerilab Technologies, Inc. (Minnesota), URL Link: http://www.amerilabtech.com/ (No Known Date).

Anonymous "P8136 Poly(vinyl alcohol)" Internet article, [Online] XP002538935, Retrieved from the Internet: URL:hllp/20 NWW. sigmaaldrich.com/catalog/ProductDetail.do?D7=0%N25-SEARCH_ CONCAT PNOIBRAND KEY%N4=P8136%7SCIAL%N25=0%QS=ON%F=SPEC retrieved on Jul. 28, 2009, year 2009, 1 pg.

Astra Packaging. Hang Tabs.Publication date unavailable. Visited Apr. 19, 2022. https://demo-octalogo.com/michaeljimanez/product/HANG-TABS/232/-clothing-racks-cash-handling-retail-tags-and-labels, 4 Pages.

Briscoe et al. "The effects of hydrogen bonding upon the viscosity of aqueous poly(vinyl alcohol) solutions," Polymer, vol. 41, No. 2000, accepted on Jul. 30, 1999, pp. 3851-3860.

Color Keeper [online], [site visited Oct. 18, 2021]. Available from internet, URL: https://shopgemz.com/products/color-keeper?variant=13094595002434&utm_source=google&utm_medium=cpc&utm_campaign=Shopping&gclid=Cj0KCQjw5JSLBhCxARIsAHgO2SdAT7LTehpyxM1qTGtnFETDalNuo9_cQSOpPwCmsmmdGA1Y0USekQEaAh0iEALw_wcB (Year: 2021).

DelphiGlass, 12 Hexagon Stepping Stone Mold, [online], site visited Oct. 18, 2022. Available from Internet, URL: http://www.delphiglass.com; Year 2022; 5 Pages.

Design Gazette (Application No. 3019850005996), "Design of Soaps", Korean Intellectual Property Office (KIPO), published on Jun. 9, 1986, 3 pgs.

Design of "Detergent tablets" (Design Registration No. 000634142-0003), (No. of Publicly known information: HH18274488), Registered Community Designs Bulletin, published by EUIPO on Jan. 9, 2007, 4 pgs.

Design of "Detergent tablets" (Design Registration No. 000634142-0004), (No. of Publicly known information: HH18274489), Registered Community Designs Bulletin, published by EUIPO on Jan. 9, 2007, 4 pgs.

Dow, UCARE Polymer LR-400, Technical Data Sheet, Downloaded in Mar. 2022, 4 pages.

Etsy. Hexagon Tags. Listed Feb. 3, 2022. Visited Apr. 19, 2022. https://www.etsy.com/listing/622774825/115-custom-tags-1-x-11-hexagon-hexagon? (Year: 2022).

(56) **References Cited**

OTHER PUBLICATIONS

Facebook. Homey-Portioned honey packaging by Katya Mushkina. Published by Packaging of the World on Oct. 30, 2019. Visited Apr. 19, 2022.https://www.facebook.com/packagingoftheworld/photos/pcb.2436401276396131/2436400983062827/?type=3&theater(Year: 2019).

Fat Daddio, Anodized Aluminum Hexagon Cake Pan, announced Jun. 17, 2008, [online], site visited Oct. 18, 2022. Available from Internet, URL:http://www.amazon.sg; Year 2008, 4 Pages.

Gemz Hair Care. Perfect Air Dry Shampoo (Set of 7). Publication date unavailable. Visited Jun. 28, 2022. https://shopgemz.com/products/perfect-airdry (Year:0), 11 pages.

Guerrini et al. "Thermal and Structural Characterization of Nanofibers of Poly(vinyl alcohol) Produced by Electrospinning", Journal of Applied Polymer Science, vol. 112, Feb. 9, 2009, pp. 1680-1687.

Hexagon Cookie Cutter Shapes Biscuit Pastry Cake Bakery Mould Pink, announced Sep. 1, 2021, [online], site visited Oct. 18, 2022. Available from Internet, URL: http://www.ebay.com; Year 2021; 5 Pages.

Hexagon Craft Shape, Craftcuts, Retrieve from: https ://www.craftcuts.com/hexagon-craft-shape.html, Hexagon wood cutouts, www.craftcuts.com, reviewed as early as May 2018 (Year: 2018), 1 page.

Hildebrand, T., et al. "Quantification of bone microarchitecture with the structure mode index", Computer Methods in Biomechanics and Biomedical Engineering, vol. 1, Jan. 14, 1997, pp. 15-23.

How Gemz work?, Gemz Hair Care, published on Oct. 1, 2018, retrieved on Apr. 27, 2021, retrieved from the Internet URL: https://www.youtube.com/watch?v=ts1waYk43g4, 3 pages.

Japanese Paper Soap, URL Link: http://www.wishingfish.com/papersoap.html, No Known Date.

Karen Duis et al., "Environmental fate and effects of water-soluble synthetic organic polymers used in cosmetic products", Environmental Sciences Europe, vol. 33, Article No. 21, Feb. 16, 2021, 78 pages.

Kuraray: "Mowiol—Technical data sheet", URL Link: http://www.kuraray.eu/fileadmin/Downloads/mowiol/TDS_Mowiol_en_20110624.pdf, dated Jun. 1, 2010.

Le Laboratoire du Bain, URL Link: (http://www.laboudubain.com/), No known date.

Indiamart. Transparent Disposable PVC Blister Trays,For Packaging. Publication date unavailable. Visited Apr. 19, 2022. https://www .indiamart.com/proddetail/pvc-blister-trays-3618179197.html, 6 pages.

Meguiars Car Wash Strips: Meguiars Inc. California, URL Link: http://www.automotivedigest.com/view_art.asp?articlesID=12414, No known date.

Merriam Webster, "Definition of Derivative", dated Aug. 11, 2021, https://www.merriam-webster.com/dictionary/derivative, 1 page.

Michelle Villett, Why You Need a Sulfate-Free Shampoo, The Skincare Edit, Feb. 22, 2016, 7 pages.

Okasaka et al., "Evaluation Of Anionic Surfactants Effects On The Skin Barrier Function Based On Skin Permeability", Pharmaceutical Development and Technology, vol. 24, No. 1, Jan. 23, 2018, pp. 99-104.

Paper Pieces Hexagons Pack 1in 1200pc, announced 2018 [online], site visited Oct. 18, 2021, Available from internet, URL:https://www.amazon.com/Paper-Pieces-HEX100B-Hexagons-1200pc/dp/B07DVYV2HN/(Year: 2018), 5 pages.

Perfect Pairs—Gemz Solid Single-Dose Shampoo Conditioner—Gemz Hair & Beauty, available on https://shopgemz.com/collections/perfect-pairs, visited on Jan. 26, 2022, 5 pages.

Plastic Hexagonal Weigh Boats Medium Dish 100pk by Scientific Equipment of Houston, https ://www.amazon.com/Plastic-Hexagonal-Weigh-Boats-Medium/dp/BOO1AE6GXK, visited Oct. 25, 2021, 7 pages.

Rounded hexagon shape, announced 2016 [online], [site visited Oct. 20, 2021], Available from internet, URL:https://www.vexels.com/png-svg/preview/139199/rounded-hexagon-shape (Year: 2016), 4 pages.

Rowe et al., "Polyvinyl Alcohol", Handbook of Pharmaceutical Excipients Sixth Edition, Pharmaceutical Press, published in 2009, 5 pages.

Sahin et al. "A Study on Physical and Chemical Properties of Cellulose Paper Immersed in Various Solvent Mixtures" International Journal Of Molecular Sciences, accepted on Jan. 10, 2008 Jan; vol. 9, No. 1, 13 pages.

Taka Terra, "Shampoo Bar with Nettle and Tamanu Oil for Fragile Hair". Publication date unavailable. Visited Apr. 19, 2022. https://takaterra.com/en/bar-shampoo-grandma-solidu, 5 Pages.

Vaughan, C.D. "Solubility, Effects in Product, Package, Penetration and Preservation", Cosmetics and Toiletries, vol. 103, Oct. 1988, 24 pages.

Vesterby, A .: "Star Volume in Bone Research: A Histomorphometric Analysis Of Trabecular Bone Structure Using Vertical Sections", The Anatomical Record 235, Accepted on Jun. 23, 1992, pp. 325-334.

Wermuth, "Similarity in Drugs: Reflections on Analogue Design", Drug Discovery, Drug Discovery Today, vol. 11 No. 7/8, Apr. 2006; pp. 348-354.

Youtube, Gemz Hair Care Review (zero waste shampoo), by Everything Proof Beauty, published on Jan. 31, 2020, 2 pages.

Zhang et al. "Study on Morphology of Electrospun Poly(vinyl alcohol) Mats," European Polymer Journal, vol. 41, accepted on Oct. 20, 2004, available online on Dec. 24, 2004, pp. 423-432.

All Office Actions; U.S. Appl. No. 29/795,031, filed Jun. 16, 2021.

* cited by examiner

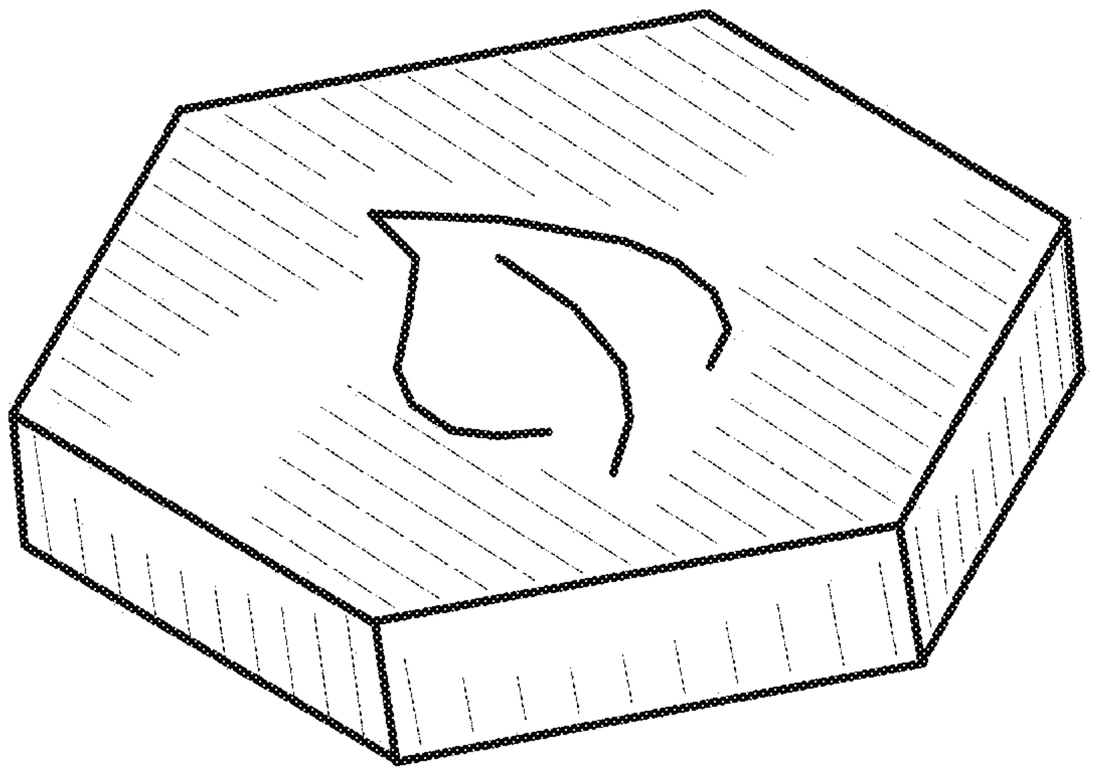


Fig. 1

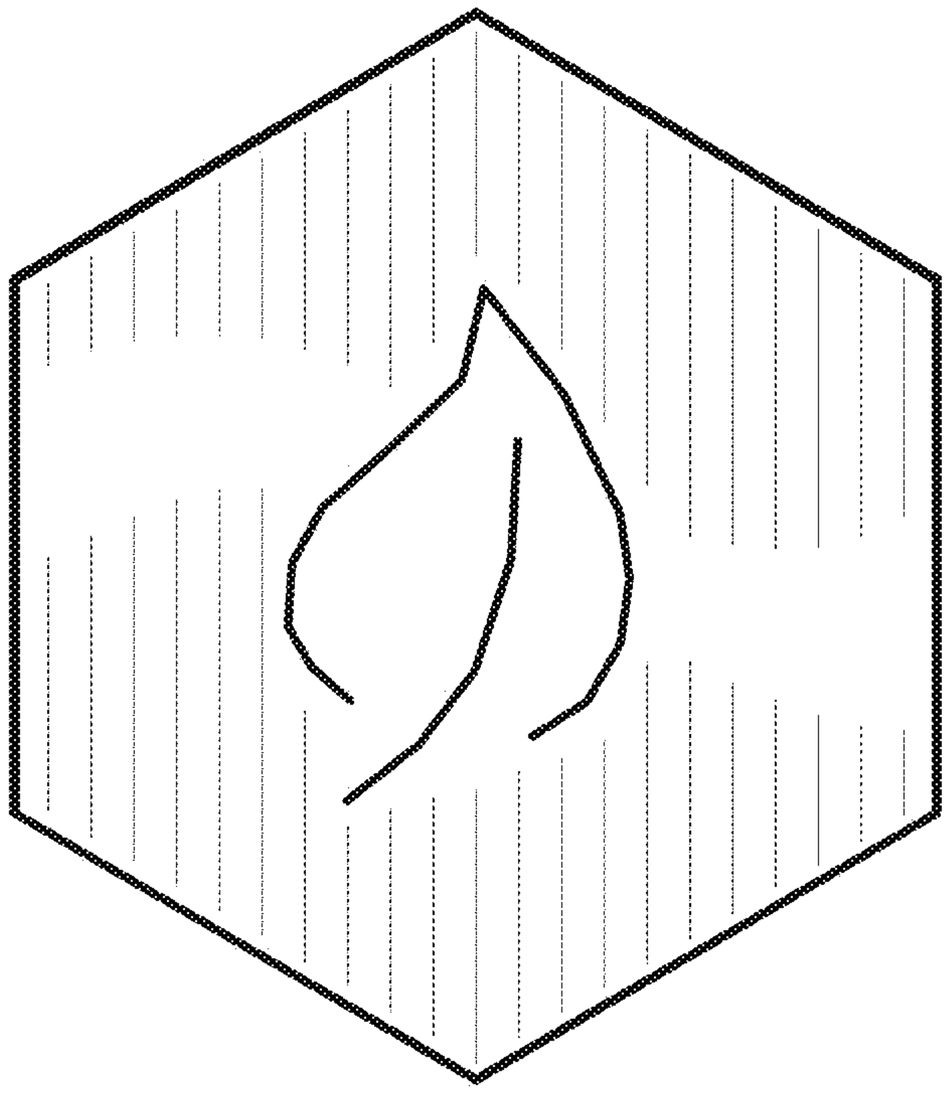


Fig. 2

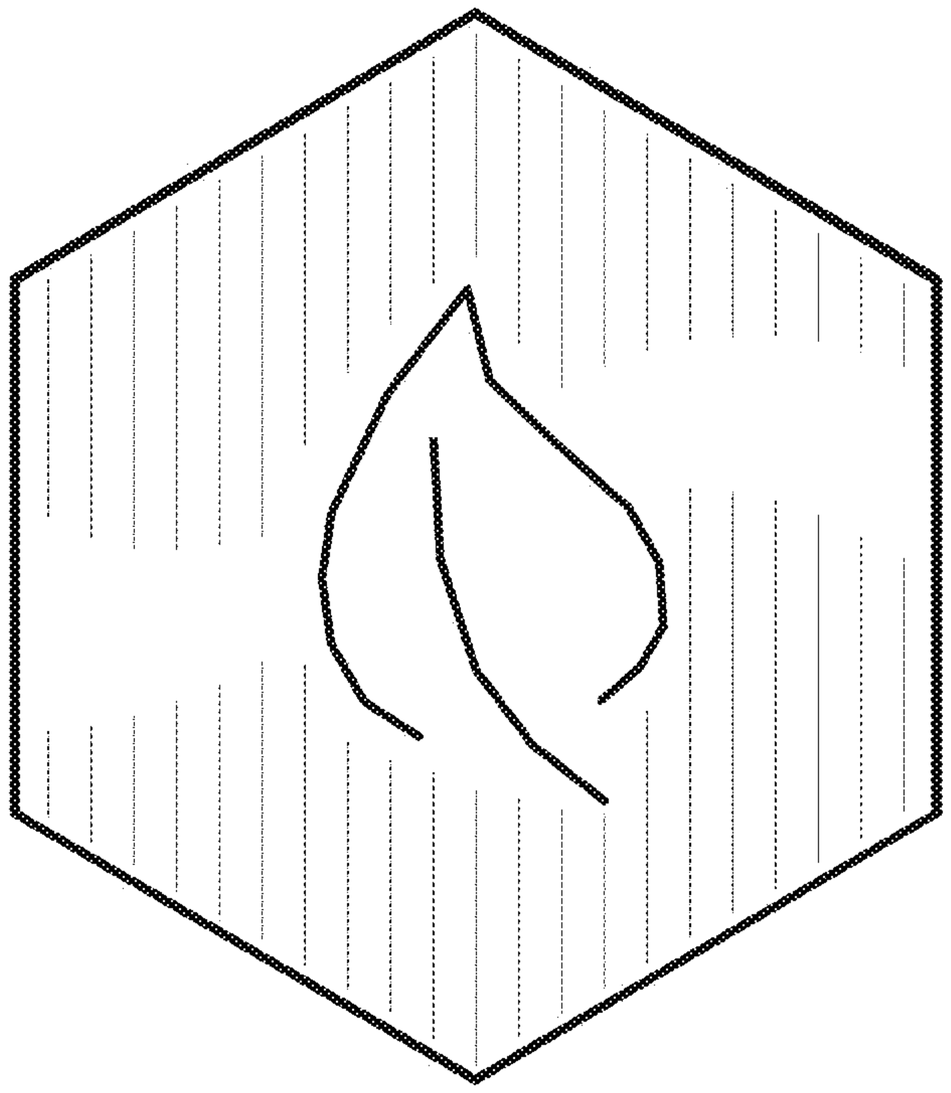


Fig. 3

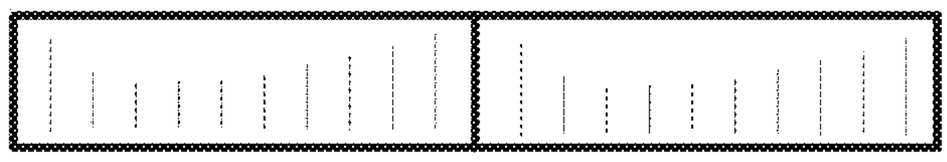


Fig. 4

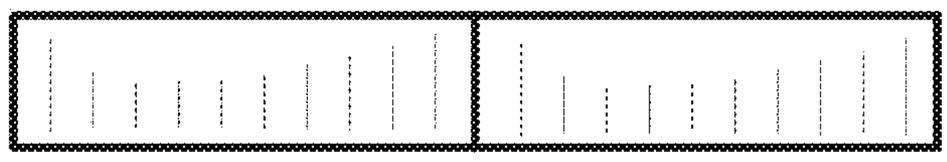


Fig. 5

Fig. 6

Fig. 7