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(12) **United States Design Patent**  
**McParland et al.**

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(54) **STORAGE CARTRIDGE**

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USPC ..... **D14/435**

(58) **Field of Classification Search**

USPC ..... D14/432-435, 483, 474, 477, 479, 496, D14/367, 353, 242, 356, 348, 362-366; 360/133, 97.01-97.02, 234.2, 236.6, 360/132, 92, 236.9; 361/684-685; 720/737, 720/600, 725; D13/133; D21/332; 369/75.11

See application file for complete search history.

|               |         |                  |            |
|---------------|---------|------------------|------------|
| D358,128 S *  | 5/1995  | Berry et al.     | D13/103    |
| D358,380 S *  | 5/1995  | Sakaguchi        | D14/357    |
| D368,429 S *  | 4/1996  | Serio, Jr.       | D9/431     |
| D368,911 S *  | 4/1996  | Lam              | D14/242    |
| 5,640,302 A * | 6/1997  | Kikinis          | 361/679.41 |
| D380,728 S *  | 7/1997  | Richards et al.  | D13/103    |
| 5,648,712 A * | 7/1997  | Hahn             | 320/111    |
| D383,115 S *  | 9/1997  | Nagele et al.    | D13/110    |
| D385,879 S *  | 11/1997 | Isonaga          | D14/507    |
| D392,644 S *  | 3/1998  | McGugan          | D14/240    |
| D394,386 S *  | 5/1998  | Fischer          | D9/432     |
| D396,856 S *  | 8/1998  | Oba              | D14/125    |
| 5,859,766 A * | 1/1999  | Van Scyoc et al. | 361/752    |
| D408,024 S *  | 4/1999  | Wilson et al.    | D14/356    |
| D427,193 S *  | 6/2000  | Fedele           | D14/348    |
| D431,230 S *  | 9/2000  | Began            | D13/184    |
| D431,557 S *  | 10/2000 | Lutz et al.      | D14/242    |
| D432,523 S *  | 10/2000 | Grinkus et al.   | D14/217    |
| D432,911 S *  | 10/2000 | Clarke et al.    | D9/415     |
| D446,499 S *  | 8/2001  | Andre et al.     | D13/110    |
| D446,718 S *  | 8/2001  | Anderson         | D9/422     |

(Continued)

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(57) **CLAIM**

The ornamental design for a storage cartridge, as shown and described.

**DESCRIPTION**

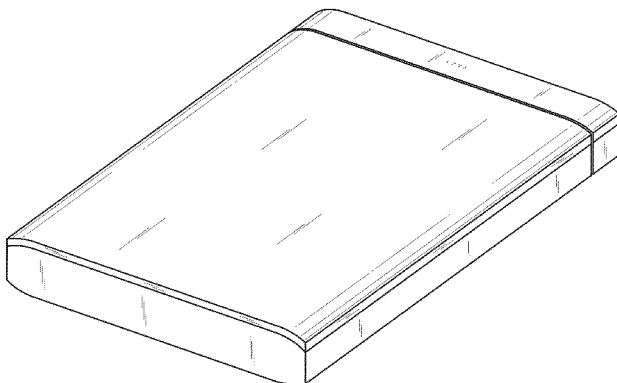
FIG. 1 is a front perspective view of a storage cartridge showing our new design; FIG. 2 is a top view thereof; FIG. 3 is a bottom view thereof; FIG. 4 is a front view thereof; FIG. 5 is a rear view thereof; and, FIG. 6 is a right side view of the storage cartridge, the left side view being a mirror image thereof. Broken lines and unshaded portions contained within broken lines are not claimed.

**1 Claim, 4 Drawing Sheets**

(56) **References Cited**

U.S. PATENT DOCUMENTS

|               |         |                 |            |
|---------------|---------|-----------------|------------|
| D246,240 S *  | 11/1977 | Hansen          | D13/103    |
| D266,509 S *  | 10/1982 | Marshall        | D14/159    |
| D268,931 S *  | 5/1983  | Ellis et al.    | D14/433    |
| D277,665 S *  | 2/1985  | Genaro et al.   | D14/149    |
| D281,968 S *  | 12/1985 | Thiele et al.   | D13/103    |
| D290,705 S *  | 7/1987  | Yomo            | D14/435    |
| 5,119,497 A * | 6/1992  | Freige et al.   | 361/679.46 |
| D330,704 S *  | 11/1992 | Wagner          | D14/242    |
| D335,866 S *  | 5/1993  | Powell et al.   | D13/152    |
| D348,448 S *  | 7/1994  | Read et al.     | D14/365    |
| D348,888 S *  | 7/1994  | Fenton et al.   | D14/242    |
| 5,391,094 A * | 2/1995  | Kakinoki et al. | 439/638    |



(56)

## References Cited

## U.S. PATENT DOCUMENTS

|           |    |   |         |                    |       |            |
|-----------|----|---|---------|--------------------|-------|------------|
| D451,076  | S  | * | 11/2001 | Sommer et al.      | ..... | D13/168    |
| D458,610  | S  | * | 6/2002  | Kadonaga           | ..... | D14/474    |
| D471,541  | S  | * | 3/2003  | Tomino et al.      | ..... | D14/240    |
| D484,853  | S  | * | 1/2004  | Alviar             | ..... | D13/110    |
| D485,551  | S  | * | 1/2004  | Mikkola et al.     | ..... | D14/240    |
| D486,814  | S  | * | 2/2004  | Nakamura           | ..... | D14/167    |
| D486,830  | S  | * | 2/2004  | Kadonaga           | ..... | D14/435    |
| D488,464  | S  | * | 4/2004  | Lin et al.         | ..... | D14/480.5  |
| D494,175  | S  | * | 8/2004  | Kawasaki           | ..... | D14/384    |
| D494,541  | S  | * | 8/2004  | Hriscu et al.      | ..... | D13/110    |
| D500,301  | S  | * | 12/2004 | Deguchi            | ..... | D14/480.4  |
| D500,302  | S  | * | 12/2004 | Deguchi            | ..... | D14/480.4  |
| D503,679  | S  | * | 4/2005  | Andre et al.       | ..... | D13/110    |
| D506,471  | S  | * | 6/2005  | Iikura et al.      | ..... | D14/480.5  |
| D511,770  | S  | * | 11/2005 | Chung              | ..... | D14/480.5  |
| D514,590  | S  | * | 2/2006  | Naruki             | ..... | D14/203.3  |
| 7,004,780 | B1 | * | 2/2006  | Wang               | ..... | 439/353    |
| 7,035,110 | B1 | * | 4/2006  | Wang et al.        | ..... | 361/737    |
| D525,977  | S  | * | 8/2006  | Yao                | ..... | D14/436    |
| D527,995  | S  | * | 9/2006  | Tanner             | ..... | D9/424     |
| D527,996  | S  | * | 9/2006  | Tanner             | ..... | D9/424     |
| D529,029  | S  | * | 9/2006  | Sekine             | ..... | D14/433    |
| 7,113,812 | B2 | * | 9/2006  | Li                 | ..... | 455/575.1  |
| D530,323  | S  | * | 10/2006 | Hsu                | ..... | D14/348    |
| D532,786  | S  | * | 11/2006 | Iseki              | ..... | D14/365    |
| D534,068  | S  | * | 12/2006 | Tanner             | ..... | D9/424     |
| D535,184  | S  | * | 1/2007  | Tanner             | ..... | D9/422     |
| D535,874  | S  | * | 1/2007  | Tanner             | ..... | D9/422     |
| D536,962  | S  | * | 2/2007  | Tanner             | ..... | D9/424     |
| D538,222  | S  | * | 3/2007  | Curello et al.     | ..... | D13/103    |
| D539,264  | S  | * | 3/2007  | Kim et al.         | ..... | D14/188    |
| D539,641  | S  | * | 4/2007  | Tanner             | ..... | D3/203.1   |
| D541,272  | S  | * | 4/2007  | Wang               | ..... | D14/356    |
| D542,787  | S  | * | 5/2007  | Siu                | ..... | D14/480.5  |
| D542,788  | S  | * | 5/2007  | Gutmann et al.     | ..... | D14/480.5  |
| D544,480  | S  | * | 6/2007  | Murakami           | ..... | D14/480.5  |
| D544,832  | S  | * | 6/2007  | Hagman et al.      | ..... | D13/103    |
| D546,328  | S  | * | 7/2007  | Kobayakawa         | ..... | D14/480.4  |
| D546,671  | S  | * | 7/2007  | Cronin et al.      | ..... | D9/420     |
| D550,613  | S  | * | 9/2007  | Hamasaki           | ..... | D13/103    |
| D554,584  | S  | * | 11/2007 | Feldman et al.     | ..... | D13/110    |
| 7,301,596 | B1 | * | 11/2007 | Morganstern et al. | ..... | 349/131    |
| D556,678  | S  | * | 12/2007 | Weinstein et al.   | ..... | D13/103    |
| D556,679  | S  | * | 12/2007 | Weinstein et al.   | ..... | D13/103    |
| D556,752  | S  | * | 12/2007 | Otsuka             | ..... | D14/480.5  |
| D556,762  | S  | * | 12/2007 | Hsiau              | ..... | D14/480.5  |
| D557,204  | S  | * | 12/2007 | Panebianco et al.  | ..... | D13/103    |
| 7,303,411 | B1 | * | 12/2007 | Morganstern et al. | ..... | 439/131    |
| D558,763  | S  | * | 1/2008  | Morganstern et al. | ..... | D14/480.7  |
| D558,787  | S  | * | 1/2008  | Yu et al.          | ..... | D14/496    |
| D560,666  | S  | * | 1/2008  | Ulrich et al.      | ..... | D14/435    |
| D561,765  | S  | * | 2/2008  | Jie                | ..... | D14/441    |
| 7,333,328 | B2 | * | 2/2008  | Funawatari et al.  | ..... | 361/679.33 |
| D563,954  | S  | * | 3/2008  | Buchanon           | ..... | D14/480.7  |
| D567,379  | S  | * | 4/2008  | Svensson           | ..... | D24/174    |
| D568,240  | S  | * | 5/2008  | Haydvoel           | ..... | D13/103    |
| D570,350  | S  | * | 6/2008  | Miller et al.      | ..... | D14/426    |
| D570,772  | S  | * | 6/2008  | Mahaffey et al.    | ..... | D13/110    |
| D571,719  | S  | * | 6/2008  | Lee                | ..... | D13/103    |
| D573,594  | S  | * | 7/2008  | Hsu                | ..... | D14/480.5  |
| D576,100  | S  | * | 9/2008  | Wang               | ..... | D13/110    |
| D578,121  | S  | * | 10/2008 | Goto               | ..... | D14/385    |
| D578,385  | S  | * | 10/2008 | Ancona             | ..... | D9/423     |
| D578,526  | S  | * | 10/2008 | Hwangbo            | ..... | D14/341    |
| D578,959  | S  | * | 10/2008 | Morishita et al.   | ..... | D13/103    |
| D580,349  | S  | * | 11/2008 | Haydvoel           | ..... | D13/103    |
| D580,352  | S  | * | 11/2008 | Croley             | ..... | D13/103    |
| D580,852  | S  | * | 11/2008 | Heinzen et al.     | ..... | D13/103    |
| D580,854  | S  | * | 11/2008 | Kim et al.         | ..... | D13/108    |
| D582,408  | S  | * | 12/2008 | Maiers et al.      | ..... | D14/356    |
| D582,419  | S  | * | 12/2008 | Sheba et al.       | ..... | D14/480.5  |
| D583,796  | S  | * | 12/2008 | Tanaka             | ..... | D14/155    |
| 7,462,044 | B1 | * | 12/2008 | Regen et al.       | ..... | 439/131    |
| D585,448  | S  | * | 1/2009  | Kawaguchi et al.   | ..... | D14/435    |
| D585,859  | S  | * | 2/2009  | Tejima             | ..... | D14/348    |
| D586,740  | S  | * | 2/2009  | Song               | ..... | D13/103    |
| D586,742  | S  | * | 2/2009  | Song               | ..... | D13/103    |
| D587,267  | S  | * | 2/2009  | Wang               | ..... | D14/356    |
| D588,147  | S  | * | 3/2009  | Finlayson et al.   | ..... | D14/480.5  |
| D590,336  | S  | * | 4/2009  | Tatehata et al.    | ..... | D13/103    |
| D591,673  | S  | * | 5/2009  | Ogasawara          | ..... | D13/103    |
| D592,130  | S  | * | 5/2009  | Tatehata et al.    | ..... | D13/103    |
| D592,131  | S  | * | 5/2009  | Heinzen et al.     | ..... | D13/103    |
| D592,661  | S  | * | 5/2009  | Woo et al.         | ..... | D14/358    |
| D594,864  | S  | * | 6/2009  | Song               | ..... | D14/358    |
| D595,221  | S  | * | 6/2009  | Schussler          | ..... | D13/103    |
| D596,634  | S  | * | 7/2009  | Wong et al.        | ..... | D14/358    |
| D597,522  | S  | * | 8/2009  | Townsend et al.    | ..... | D14/203.7  |
| D599,754  | S  | * | 9/2009  | Xie et al.         | ..... | D14/125    |
| D600,640  | S  | * | 9/2009  | Stein et al.       | ..... | D13/103    |
| D601,121  | S  | * | 9/2009  | Chen               | ..... | D14/167    |
| D601,494  | S  | * | 10/2009 | Otani et al.       | ..... | D13/103    |
| D603,789  | S  | * | 11/2009 | Hallee et al.      | ..... | D13/103    |
| D612,329  | S  | * | 3/2010  | Guccione et al.    | ..... | D13/108    |
| D616,425  | S  | * | 5/2010  | Hsia               | ..... | D14/240    |
| 7,721,908 | B2 | * | 5/2010  | Cronin et al.      | ..... | 220/345.4  |
| D617,323  | S  | * | 6/2010  | Willenz            | ..... | D14/356    |
| D618,237  | S  | * | 6/2010  | Wang               | ..... | D14/356    |
| D618,238  | S  | * | 6/2010  | Sin et al.         | ..... | D14/356    |
| D620,006  | S  | * | 7/2010  | Bull               | ..... | D14/356    |
| D620,018  | S  | * | 7/2010  | Nan et al.         | ..... | D14/480.7  |
| D622,659  | S  | * | 8/2010  | Soeda et al.       | ..... | D13/103    |
| D622,713  | S  | * | 8/2010  | Chung et al.       | ..... | D14/242    |
| 7,782,602 | B2 | * | 8/2010  | Zhu                | ..... | 361/679.31 |
| D623,590  | S  | * | 9/2010  | Otani et al.       | ..... | D13/103    |
| D624,539  | S  | * | 9/2010  | Tsai               | ..... | D14/356    |
| D624,920  | S  | * | 10/2010 | Sheppard et al.    | ..... | D14/435.1  |
| D625,730  | S  | * | 10/2010 | Cacioppo et al.    | ..... | D14/435.1  |
| D626,437  | S  | * | 11/2010 | Lee et al.         | ..... | D10/65     |
| D626,554  | S  | * | 11/2010 | Sogabe             | ..... | D14/356    |
| D628,535  | S  | * | 12/2010 | Cheng              | ..... | D13/108    |
| D629,399  | S  | * | 12/2010 | Camarena et al.    | ..... | D14/356    |
| D629,408  | S  | * | 12/2010 | Otsuka             | ..... | D14/480.5  |
| D630,629  | S  | * | 1/2011  | Seifert et al.     | ..... | D14/341    |
| D631,055  | S  | * | 1/2011  | Gilbert et al.     | ..... | D14/480.5  |
| D631,885  | S  | * | 2/2011  | Maier              | ..... | D14/435.1  |
| D632,326  | S  | * | 2/2011  | Hou                | ..... | D16/229    |
| D632,643  | S  | * | 2/2011  | Tanaka et al.      | ..... | D13/103    |
| D634,705  | S  | * | 3/2011  | Yip et al.         | ..... | D13/103    |
| D635,536  | S  | * | 4/2011  | Xiao               | ..... | D14/138 AA |
| D636,357  | S  | * | 4/2011  | Kim et al.         | ..... | D14/125    |
| D636,383  | S  | * | 4/2011  | Hao                | ..... | D14/242    |
| D638,002  | S  | * | 5/2011  | Chen               | ..... | D14/242    |
| D639,736  | S  | * | 6/2011  | Su                 | ..... | D13/110    |
| D641,360  | S  | * | 7/2011  | Ledbetter et al.   | ..... | D14/356    |
| D641,361  | S  | * | 7/2011  | Ledbetter et al.   | ..... | D14/356    |
| D641,362  | S  | * | 7/2011  | Dublin             | ..... | D14/356    |
| D641,364  | S  | * | 7/2011  | McParland          | ..... |            |
| D641,368  | S  | * | 7/2011  | McParland          | ..... | D14/434    |
| D642,517  | S  | * | 8/2011  | Inman et al.       | ..... | D13/103    |
| D642,585  | S  | * | 8/2011  | Lan et al.         | ..... | D14/480.5  |
| D643,365  | S  | * | 8/2011  | Shaper             | ..... | D13/103    |
| D644,248  | S  | * | 8/2011  | Kim et al.         | ..... | D14/496    |
| D644,988  | S  | * | 9/2011  | Finney et al.      | ..... | D13/103    |
| D645,814  | S  | * | 9/2011  | Otani et al.       | ..... | D13/103    |
| D645,866  | S  | * | 9/2011  | Schindler          | ..... | D14/435    |
| D646,222  | S  | * | 10/2011 | Tatehata et al.    | ..... | D13/103    |
| D647,901  | S  | * | 11/2011 | Lin et al.         | ..... | D14/356    |
| D648,340  | S  | * | 11/2011 | Okura              | ..... | D14/480.7  |
| D648,690  | S  | * | 11/2011 | Snodgrass et al.   | ..... | D14/125    |
| D648,730  | S  | * | 11/2011 | Huang              | ..... | D14/480.5  |
| D650,325  | S  | * | 12/2011 | Kim et al.         | ..... | D13/103    |
| D650,737  | S  | * | 12/2011 | Hamilton           | ..... | D13/103    |
| D650,738  | S  | * | 12/2011 | Leung              | ..... | D13/107    |
| D651,636  | S  | * | 1/2012  | Chang              | ..... | D16/230    |
| D654,016  | S  | * | 2/2012  | Neidhart           | ..... | D13/103    |
| D655,708  | S  | * | 3/2012  | Frank              | ..... | D14/435.1  |
| D660,787  | S  | * | 5/2012  | Lambert et al.     | ..... | D13/103    |
| D661,248  | S  | * | 6/2012  | Fahrendorff et al. | ..... | D13/107    |
| D661,249  | S  | * | 6/2012  | Smith et al.       | ..... | D13/110    |
| D662,498  | S  | * | 6/2012  | Morgan             | ..... |            |
| D662,878  | S  | * | 7/2012  | Fahrendorff et al. | ..... | D13/107    |
| D663,263  | S  | * | 7/2012  | Gupta et al.       | ..... | D13/103    |
| D663,293  | S  | * | 7/2012  | MacManus et al.    | ..... | D14/240    |

(56)

References Cited

U.S. PATENT DOCUMENTS

D664,917 S \* 8/2012 Taguchi ..... D13/103  
 D665,340 S \* 8/2012 Obata ..... D13/103  
 D669,072 S \* 10/2012 Huang ..... D14/356  
 D669,427 S \* 10/2012 Ignor et al. .... D13/103  
 D670,297 S \* 11/2012 Huang ..... D14/480.5  
 D674,333 S \* 1/2013 Lemelman et al. .... D13/103  
 D674,367 S \* 1/2013 Dernier ..... D14/125  
 D675,215 S \* 1/2013 Akana et al. .... D14/480.1  
 D677,218 S \* 3/2013 Baker et al. .... D13/107  
 D677,623 S \* 3/2013 Fitch et al. .... D13/108  
 D678,187 S \* 3/2013 Huang ..... D13/103  
 D678,188 S \* 3/2013 Sasada ..... D13/103  
 D678,191 S \* 3/2013 Fitch et al. .... D13/108  
 D678,402 S \* 3/2013 Sato ..... D18/50  
 D679,711 S \* 4/2013 Perry et al. .... D14/434  
 D680,116 S \* 4/2013 McParland et al. .... D14/434  
 D682,777 S \* 5/2013 Gupta et al. .... D13/103  
 D684,113 S \* 6/2013 Han et al. .... D13/103  
 D684,114 S \* 6/2013 Otani et al. .... D13/103  
 D684,532 S \* 6/2013 Ignor et al. .... D13/103  
 D684,926 S \* 6/2013 Murchison et al. .... D13/107  
 D684,957 S \* 6/2013 Smith et al. .... D14/242  
 D685,319 S \* 7/2013 Ignor et al. .... D13/103  
 D685,320 S \* 7/2013 Murchison et al. .... D13/107  
 D685,374 S \* 7/2013 Schindler ..... D14/435

D685,774 S \* 7/2013 Kim ..... D14/240  
 D686,148 S \* 7/2013 Inaba ..... D13/103  
 D686,149 S \* 7/2013 Lee et al. .... D13/103  
 D686,150 S \* 7/2013 Lee et al. .... D13/103  
 D686,152 S \* 7/2013 Lee et al. .... D13/103  
 D686,981 S \* 7/2013 Koyabu et al. .... D13/103  
 D687,023 S \* 7/2013 Jung et al. .... D14/242  
 D687,042 S \* 7/2013 Yoneta et al. .... D14/480.5  
 D687,768 S \* 8/2013 Minamikawa ..... D13/107  
 D688,198 S \* 8/2013 Takeshita et al. .... D13/103  
 D690,262 S \* 9/2013 Huang et al. .... D13/103  
 D692,826 S \* 11/2013 Aida et al. .... D13/108  
 D693,292 S \* 11/2013 Salvi et al. .... D13/103  
 D693,297 S \* 11/2013 Inskeep ..... D13/108  
 D693,349 S \* 11/2013 Morgan et al. .... D14/434  
 D694,234 S \* 11/2013 McParland et al. .... D14/365  
 D697,917 S \* 1/2014 Sato et al. .... D14/420  
 D698,792 S \* 2/2014 Lin et al. .... D14/435  
 D700,139 S \* 2/2014 Chan et al. .... D13/103  
 2002/0177362 A1 \* 11/2002 Chang ..... 439/638  
 2003/0122457 A1 \* 7/2003 Diaz et al. .... 312/223.2  
 2003/0167376 A1 \* 9/2003 Koh ..... 711/115  
 2004/0063346 A1 \* 4/2004 Lin et al. .... 439/131  
 2004/0255313 A1 \* 12/2004 Kaczeus et al. .... 720/651  
 2007/0049217 A1 \* 3/2007 Suzuki et al. .... 455/90.3  
 2007/0105418 A1 \* 5/2007 Fu et al. .... 439/136  
 2009/0033621 A1 \* 2/2009 Quinn et al. .... 345/158  
 2011/0075349 A1 \* 3/2011 Ma et al. .... 361/679.41

\* cited by examiner

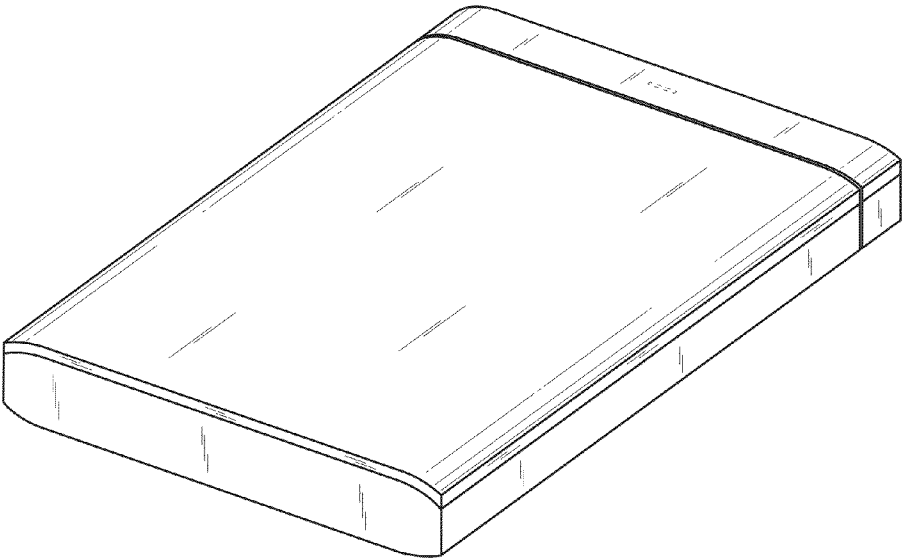


Fig. 1

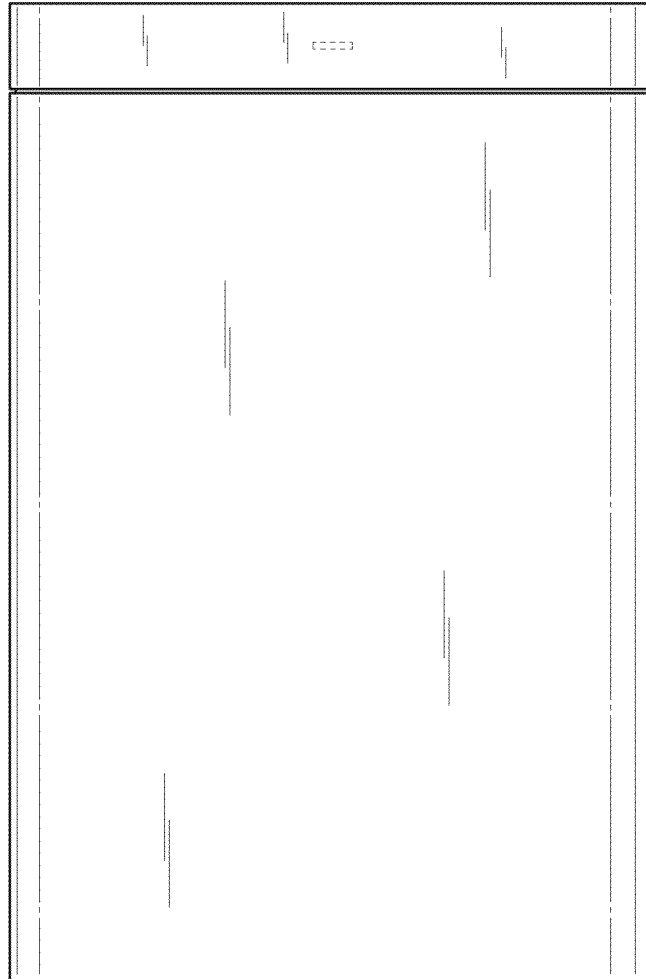
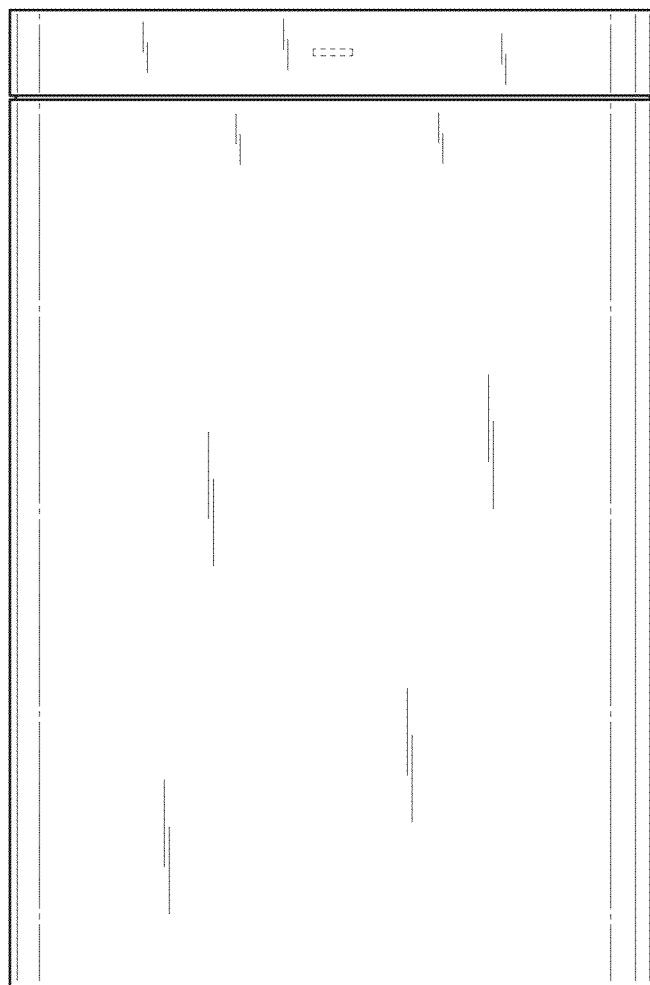


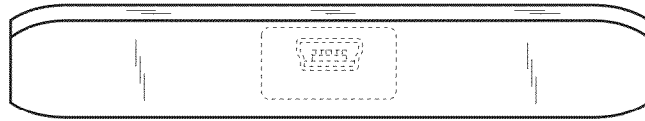
Fig. 2



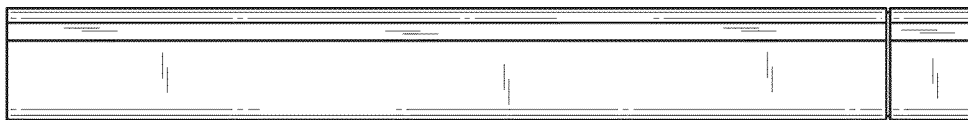
**Fig. 3**



**Fig. 4**



**Fig. 5**



**Fig. 6**