## Hungarian Globe (a.k.a Equator Ball, Magic Sphere, IQ Ball)



Hungarian Globe and Equator Ball, made circa 1982. (metal covered plastic, 3 inches)


IQ Ball, circa 2000.
(plastic, 3 inches)
Three rings of 12 squares each (going around each of the three dimensions) can be rotated. The goal is to mix up the puzzle and then restore the original pattern, or in the case of the IQ Ball, the directions that were sold with it give different challenges. A number of 1980's and 1990's patents describe mechanisms for this puzzle, including the patent of R. Destics which describes a generalized mechanism (used by the Mozaika Puzzle) that can also twist along the equator, and the Magic Sphere puzzle allows faces to rotate. Jaap's Page presents a solution.

## Further Reading

Jaap's Page, from: http://www.geocities.com/jaapsch/puzzles/equator.htm
Molnar GB Patent, from: www.epo.org - patent no. GB2088728
Green Patent, from: www.uspto.gov - patent no. 4,452,454
Green Second Patent, from: www.uspto.gov - patent no. 5,074,562
Liu Patent, from: www.uspto.gov - patent no. 5,114,148
Destics Patent, from: www.uspto.gov - patent no. 5,566,941
Maxim Patent, from: www.uspto.gov - patent no. 6,186,504

## Directions That Were Sold With The IQ Ball



Game 1. Line same color patterns or characters up together to be oeeoe orderly in one direction. They can be lined up for six lines. (as right figure)

Game 2. Line same color patterns or characters up together to be cross shape orderly in one direction. They can be lined up for six sets of cross. (as right figure)

Game 3. Any figure can be arranged as you like.


## WAYS OF SELF-TRAINING

You can play either Game 1 or Game 2. But Game 2 is more difficult. 1. Red 12345 are firstly lined up. (either in lined or cross shape) 2. Then line A B C DE up. (either in lined or cross shape)
3. Finally, another blue 12345 are lined up. (either in lined or cross shape) You also can set any patterns according to PRACTICE COURSE.

According to the following tables, you will find how high your thinking ability and L. Q. are:

| Thinking Grade | I. Q. Figure | Level |
| :---: | :---: | :---: |
| T. G. $=$ Top | 180 | Genius or close to genius |
| T. G. $=1$ | 170 |  |
| T. G. $=2$ | 160 | Very smart |
| $T \cdot G=3$ | -150 |  |
| T. G. $=4$ | 140 | Smart |
| T. G. $=5$ | 130 |  |
| T. G. $=6$ | 120 |  |
| T. G. $=7$ | 110 | General |
| T. G. $=8$ | 100 |  |
| T. G. $=9$ | 90 |  |

INTELLIGENCE IS THE WEALTH WHICH IS NEVER USED UP. THINKING IS THE POWER OF PROGRESS FOR MANKIND.

##  <br> OX® OX® OX® OX® OX® OX®

(L.Q. ENHANCING PUZZLE)

U. S. Pat 5114148 Europe and other
countries patert.

Check ! Your I. Q. figure ?
Test ! Your thinking ability ? Compare! Who is smart ?

## PRACTICE COURSE



IN ONE SET

T. G. (Thinking Grade) means the level and the extent of one's thinking ability. If you can complete it step by step from PRACTICE 1 to 5, your thinking and logical ability must be promoted, and also your L.Q. figure increased.

