

Ten Billion Barrel



a.k.a. Billion Barrel, Tumbler Puzzle

Patented G. Yokoi 1983, made by Nintendo.

(plastic, 3.4 inches high by 2.8 inches diameter;

left 1980, green, blue, red, orange, yellow with black balls on green, yellow, red;

right 2009, orange, yellow green, blue, red with black balls on orange, red, green;

the Yoki patent also describes the *Trillion* puzzle)

There are 23 balls in 5 columns, 4 of each of red, orange, yellow, green, blue, where three of the columns have an extra black ball. There are 6 rows of plastic rings around the puzzle where rows 1 and 6 cannot rotate, rows 2 and 3 rotate together, and rows 4 and 5 rotate together. The black body that holds the balls can slide up or down 1 unit inside the rings to shift the three longer columns. The goal is to put each of the 5 colors in their own column, with the three black balls on top of the three longer columns. *Jaap's Page* presents a solution. Here is a view of the other side of the solved puzzle, and a view of it mixed up:



Further Reading

Jaap's Page, from: <http://www.jaapsch.net/puzzles/nintendo.htm>

Martin's Page, from: <http://www.smartbytes.co.uk/Tumbler/tumbler0.htm>

Spanish Page, from: <http://chelis.iespana.es/soto1.htm>

Yokoi Patent, from: www.uspto.gov - patent no. 4,376,537

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