Abstract. Given an irrational number \( \alpha \) and a positive integer \( m \), the distinct fractional parts of \( \alpha, 2\alpha, \ldots, m\alpha \) determine a partition of the interval \([0, 1]\). Defining \( d_\alpha(m) \) and \( d'_\alpha(m) \) to be the maximum and minimum lengths, respectively, of the subintervals of the partition corresponding to the integer \( m \), it is shown that the sequence \( \left( \frac{d_\alpha(m)}{d'_\alpha(m)} \right)_{m=1}^\infty \) is bounded if and only if \( \alpha \) is of constant type. (The proof of this assertion is based on the continued fraction expansion of irrational numbers.)