Linus Lindroos, Andrew Sills, and Hua Wang
Odd Fibbinary Numbers and the Golden Ratio,

Abstract
The fibbinary numbers are positive integers whose binary representation contains no consecutive ones. We prove the following result: If the $j$th odd fibbinary is the $n$th odd fibbinary number, then $j = \lfloor n\phi^2 \rfloor - 1$. 