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We give a combinatorial proof of the following theorem: The number of partitions of  $N$  into distinct parts in which odd-indexed (even-indexed) parts are even is equal to the number of partitions of  $N$  into parts congruent to  $2,3,7 \pmod{8}$  ( $1,5,6 \pmod{8}$ ). This provides a new view of the infinite products appearing in the little Göllnitz identities. We also show that a finite version of the little Göllnitz product counts lecture hall partitions in which in which odd-indexed (even-indexed) parts are even, giving an analog of the Lecture Hall Theorem of Bousquet-Mélou and Eriksson. (Received August 28, 2009)