

**Proposition 4.50.** *[1XS]* Assume that a (partial) order associated to  $\mathbb{N}$  satisfies *[26H]*. Let  $P(n)$  be a logical clause, true for  $n = 0$  and such that

$$\forall n \in \mathbb{N}, \left( (\forall k \leq n, P(k)) \Rightarrow P(Sn) \right) \quad (4.51)$$

then  $P$  is true for every  $n \in \mathbb{N}$ .