1014-20-1536 **Colin C. Ferguson*** (ccfergus@math.uiuc.edu), 250 Altgeld Hall, 1409 W. Green Street, Urbana, IL 61801. *Chain Conditions on Subnormal Subgroups.*

A group G is said to have the property $\max-\infty s^*$ if it has no infinite strictly increasing chains of infinite subnormal subgroups, but it does have such a chain of finite subnormal subgroups. A dual definition is made for the property $\min-\infty s^*$. If G has $\max-\infty s^*$, it is shown that there is a normal Prüfer subgroup R such that G/R has $\max-s$ and R is the unique quasifinite subgroup of G. A converse of this result is also proved, so a complete characterization of groups with $\max-\infty s^*$ is obtained. A similar characterization has been found for groups with the property $\min-\infty s^*$.

After a reduction to the case where R is central, a homological construction of all the groups with $\max-\infty s^*$ is obtained and the isomorphism problem for the constructed groups is solved. (Received September 28, 2005)