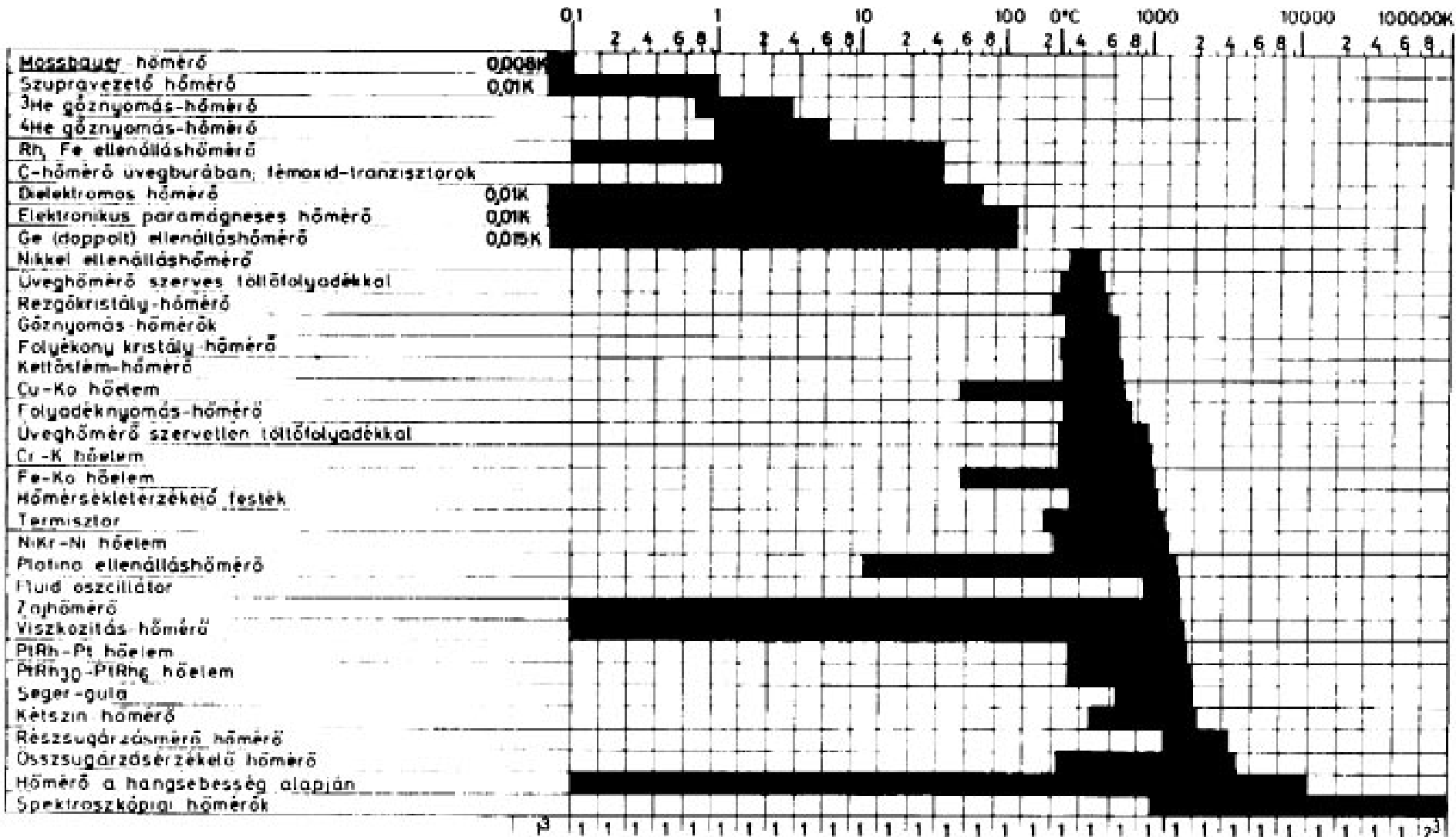


# Mivel és hogy mérünk hőmérsékletet?



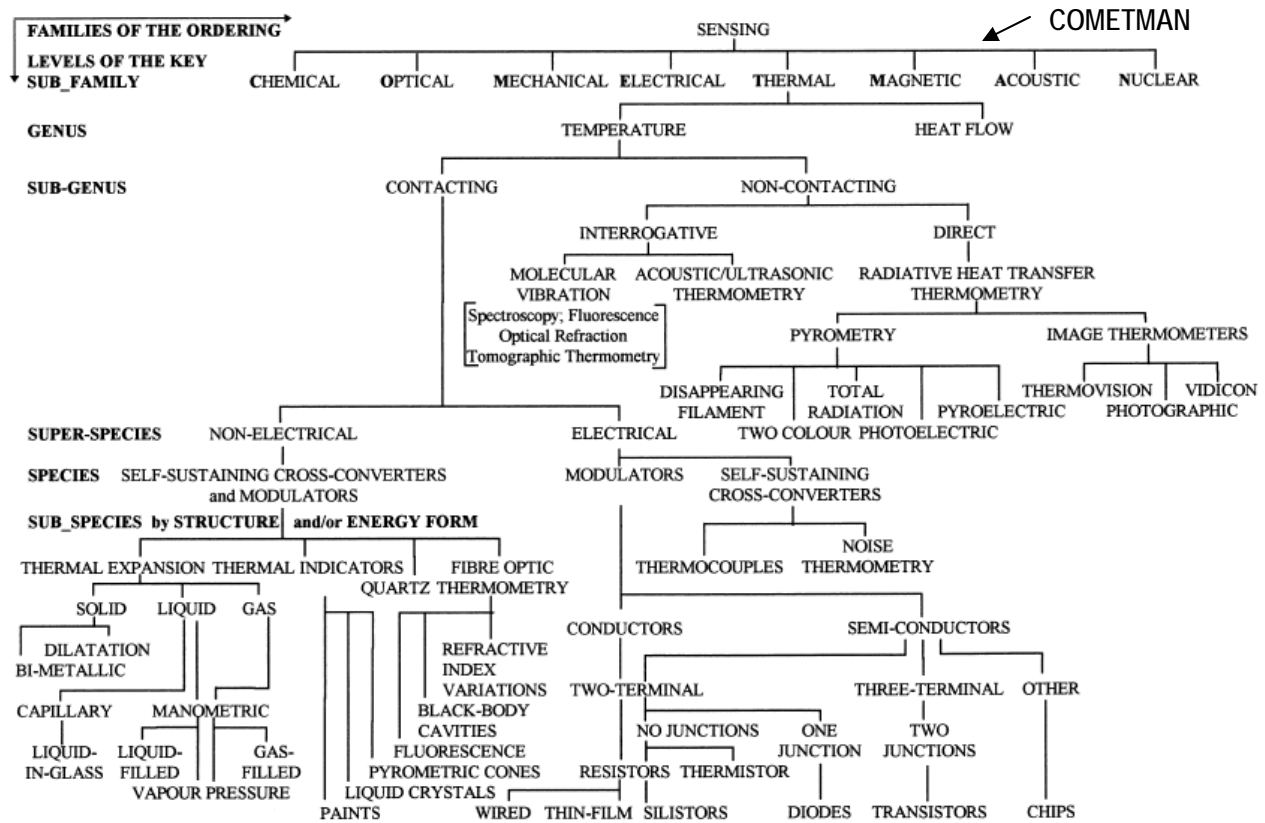


Fig. 3. A dendrograph for temperature sensor classification. (tree-diagram)

Fig. 3 gives a fuller classification of temperature sensors. It is based upon comparing the similarity between human sensing of temperature and sensing by technical thermometers. Humans can sense hotness and hotness relations by touch and by sight. The heat transfer mechanisms involved are conduction/convection in the case of touch sensing and radiation in the case of sight sensing. In the classification of physical thermometers it is also appropriate to group by these two methods of heat transfer. Thus there is a contacting group of temperature sensors, where the heat transfer is by conduction and convection, and a non-contacting group, where the heat transfer is by radiation. Further levels of this dendrograph are obtained by grouping on the basis of how changes in temperature are sensed by the transduction or cross-conversion of thermal energy to the other energy forms in the COMETMAN classification of energy as well as by physical structure. A wide classification of the non-contacting group is also shown in Fig. 3.