The analysis and indexing of X-ray photographs for hydrogenated Pd$_4$Cu$_{14}$ single crystal made it possible to present the crystal reciprocal lattice as a superposition of two tetragonal lattices which have a coincident axial vector and are mirror symmetrical to each other (see the figure). The transformation from the cubic structure to the tetragonal one is accompanied by twinning with invariant plane (011). The ordered tetragonal structure has the type CuAu(I) with the space group Fd$ar{4}$mm. This type of ordered structure corresponds to the equatomic relation of the alloy components. Consequently, the ordering in PdCu alloy during hydrogenation is realised by CuAu-type and not by the CuAu(II) one. Probably, this is connected with the change in the electron concentration of alloys due to hydrogenation.