Metal borohydride (MBH4) compounds have been studied thoroughly for their potential as hydrogen storage materials. Zirconium borohydrides are one such class of metal borohydrides with hydrogen storage potential, however the interaction between the hydrides from BH4- and Zr is another fascinating feature worth exploring. Cp2Zr(BH4)2 has been investigated for its potential as a hydrogen storage material and as a precursor for other hydrogen storage materials. But, to our knowledge, the structure of Cp2Zr(BH4)2 showing the position of the hydrides is unknown. We present here the synthesis and crystal structure of Cp2Zr(BH4)2 showing, for the first time, the position of the hydrides in relation to Zr.