Cu-Nb (Copper-Niobium)

H. Okamoto

[Massalski2] adopted the Cu-Nb phase diagram reviewed by [1982Cha]. The phase diagram was a simple peritectic type with a nearly horizontal liquidus on the Cu side.

Since then, [1984Ter] reported that the phase diagram was a monotectic type, as introduced by [1991Oka].

[2009Mun] measured the (Nb) liquidus temperatures at nine different compositions and constructed the Cu-Nb phase diagram by thermodynamic modeling. The result is shown in Fig. 1. The simple peritectic phase diagram was confirmed.

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Fig. 1 Cu-Nb phase diagram