The Ag-Sb phase diagram in [Massalski2] was redrawn from [Hansen]. The phase boundaries of the ε and ε′ phases were mostly undetermined. An ε to ε′ polymorphic transformation was reported at 440 (Ag-rich end) to 449 °C (Sb-rich end).

The phase boundaries of ε in Fig. 1 are as determined by [92Fes] by means of DTA and XRD. Diffraction spectra of specimens quenched from above and below the presumed transformation temperature of ε were identical. Hence, an ε′ phase is not shown in Fig. 1.

The liquidus of the cph ζ phase is adjusted in Fig. 1 so that it can be smoothly extrapolated to ~800 °C at 0 at.% Sb (approximate melting point of cph Ag [93Oka]).

Cited References

92Fes: P. Feschotte, F. Monachon, and P. Durussel, *J. Alloys Compounds, 186*, L17-L18 (1992).

93Oka: H. Okamoto and T.B. Massalski, to be published in *J. Phase Equilibria, 14* (1993).

Al-Sb (Aluminum-Antimony)

H. Okamoto

The Al-Sb phase diagram in [Massalski2] was redrawn from [84Mca]. [90Cou] also reported a very similar diagram (not shown). Both [84Mca] and [90Cou] calculated the phase diagram by optimization of thermodynamic and phase boundary data. The calculated phase boundaries of both works are in good agreement with experimental results.

Cited References

84Mca: A.J. McAlister, *Bull. Alloy Phase Diagrams, 5*(5), 462-465 (1984).

90Cou: C.A. Coughanowr, U.R. Kattner, and T.J. Anderson, *Calphad, 14*, 193-202 (1990).

Au-In (Gold-Indium)

H. Okamoto

The Au-In phase diagram in [Massalski2] was adopted from [87Oka]. The Au-rich phase boundary of ζ was unknown, and the existence of the α_1 phase with a nearly constant width to low temperatures was questioned.

[92Ans] calculated the Au-In phase diagram by optimization of thermodynamic [88Ans] and phase diagram data (same as [87Oka]). The ζ and α_1 phase boundaries of the [87Oka] diagram are modified in Fig. 1 according to the calculated results. The phase boundaries below the eutectoid decomposition of α_1 must be confirmed experimentally. Boundaries of other phases have not been modified because [92Ans] assumed no solubility ranges in their model, whereas [87Oka] showed substantial ranges for the γ and ψ phases, as shown in Fig. 1.

Cited References

87Oka: H. Okamoto and T.B. Massalski, *Phase Diagrams of Binary Gold Alloys*, H. Okamoto and T.B. Massalski, Ed., ASM International, Metals Park, OH, 142-153 (1987).

88Ans: I. Ansara and J.P. Nabot, *Thermochim. Acta, 129*, 89-97 (1988).

92Ans: I. Ansara and J.P Nabot, *Calphad, 16*(1), 13-18 (1992).

Be-Nb (Beryllium-Niobium)

H. Okamoto

The Be-Nb phase diagram in [Massalski2] was redrawn from [87Oka], who added Be_5Nb to the diagram of [Massalski1] based on the report of this compound by [61Arz] and [63Arz], with confirmation by [68Ray]. In this diagram, the peritectoidal formation of Be_5Nb and eutectoidal decomposition of $Be_{17}Nb_2$ were shown at 1485 and 1415 °C, respectively, ac-