Ternary and Higher Order Aluminum Phase Diagram Updates

Ternary aluminum phase diagrams have been compiled by ASM International ($Handbook\ of\ Ternary\ Alloy\ Phase\ Diagrams$, eds., P. Villars, A. Prince, and H. Okamoto, Volumes 3-4) and by VCH Verlagsgesellschaft, Germany ($Ternary\ Alloys$, eds., G. Petzow and G. Effenberg, Volumes 3-8). They cover the period from 1900 to 1989 or so. A large number of new publications have appeared in the literature in the last 15 years. It is the purpose of this Addendum to review briefly the new information, using as the starting point either the data compiled in the ASM volumes or any other later evaluation. This first set of updates covers 12 ternary Al-Ti-X ternary systems (X = B, Co, Dy, Er, Ga, Gd, Ho, Pd, Pr, Pt, Sb, or Y) and four quaternary systems: Al-Co-Cu-Ti, Al-Co-Fe-Ti, Al-Co-Ni-Ti, and Al-Cu-Ni-Ti. The quaternary data are limited and pertain only to the equilibria between B2 and $L2_1$ -type ordered phases. An update of the Al-Ti binary phase diagram, which is common to all the reviewed systems, is given at the beginning.

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Editor

Phase Diagrams of Ternary Iron Alloys

Parts 1, 2, 3, 5, and 6