

The calculated diagram for the copper-nickel system obtained from equation (5) is shown in Fig. 1.

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Fig. 2. .... .

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In the nickel-cobalt system it is known experimentally that the width of the region of phase separation is practically zero over the whole range of concentrations. If we take....., then the calculated width of the region of phase separation in this system, as calculated from formula (5), is  $\pi$  no greater than....., which agrees with the experimental results.

The two diagrams mentioned correspond to symmetrical "cigars". When.....and inequalities (4) and (2) are satisfied, the region of phase separation, according to formula (4), should have the form of an unsymmetrical "bent cigar", in which the ~~line~~ median line of the "cigar", i.e., ....., is convex to the x axis for..... and concave for..... .

By using experimentally-established diagrams and drawing the lines.....on these, we may verify the agreement between these lines and formula (4b) and also determine the value of.....<sup>by reference to</sup> ~~from~~ the deviation from the linear relationship.

The values of..... in ergs/particle are 0.57 for Ag-Pd, 0.05 for Ag-Au, and 0.54 for Cu-Pd.

For all three systems criterion (1) is satisfied and the calculated curve.....agrees closely with the experimental, which may