Effect of Annealing on Microstructure of Rapidly Quenched Fe-Sn-B Based Alloys

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Abstract. Fe-Sn-B based alloys were prepared by planar flow casting in the form of ribbons approximately 20 μm thick and 6 mm wide. Nominal chemical compositions were $Fe_{81}Sn_7B_{12}$ and $(Fe_{81}Sn_7B_{12})_{99}Cu_1$. Ribbons were annealed at temperature range from 648K to 798K for the duration of 30min, changes of microstructure and morphology was studied. Potential alternative to recently developed NANOMET-like alloys was presented.