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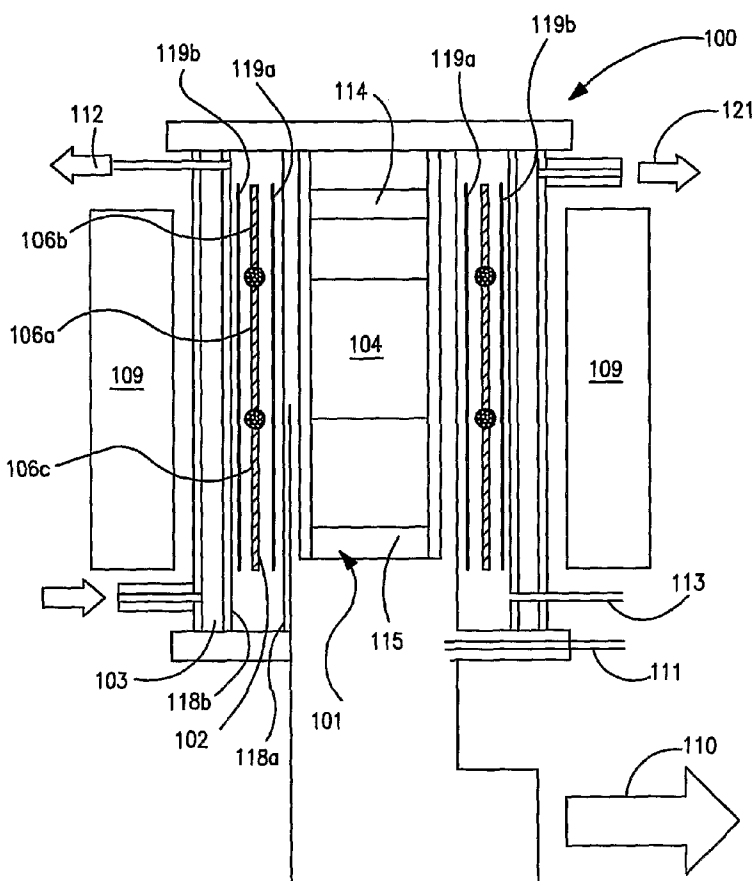
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(54) Title: MAGNETIC ANNEALING TOOL HEAT EXCHANGE SYSTEM AND PROCESSES



(57) Abstract: A heat exchange system and processes for a magnetic annealing tool is provided. The system includes a process chamber housing workpieces to be processed; an element chamber partly surrounding the periphery of the process chamber, at least one means for drawing a vacuum in fluid communication with the process chamber and separately with the element chamber in order to apply a vacuum to either or both of the process and element chamber so as to promote radiation heating of the workpieces; at least one supply of fluid in communication with the process chamber and separately with the element chamber to supply a cooling gas so as to promote conductive cooling of the workpieces; a cooling chamber disposed to surround the element chamber; and means for generating a magnetic field disposed on the outer periphery of the cooling chamber.

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
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