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Bennett linkage; 5.5 Physical model of alternative form of Bennett linkage; 5.6 Assemblies of alternative form linkages; 5.7 Applications; 6. Spatial motion structures based on Bricard linkages; 6.1 Threefold-symmetric Bricard linkages and its assemblies; 6.2 Alternative forms of threefold-symmetric Bricard linkage; 6.3 Line and plane symmetric Bricard linkage and its alternative forms; 7. Layouts of spatial motion structures; 7.1 Tilings and patterns  
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Sommario/riassunto

"Motion structures are simply assemblies of resistant bodies connected by movable joints. Unlike conventional structures, they allow large shape transformations to satisfy practical requirements and they can be used in: shelters, emergency structures and exhibition stands aircraft morphing wings satellite solar panels and space antenna morphing core materials for composites medical implants for minimum invasive surgery. Though traditionally the subject falls within structural engineering, motion structures are more closely related to other mechanisms, and they draw on the principles of kinematic and geometrical analysis in their design. Indeed their design and analysis can be viewed as an extension of the theory of mechanisms, such as rigid origami, and can make effective use of a wealth of mathematical principles. This book outlines the relevant underlying theory and motion structural concepts, and uses a number of innovative but simple structures as examples."--Provided by publisher.

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