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Mohan et al.(10) **Pub. No.: US 2023/0231797 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **SESSION STATE SYNCHRONIZATION AND
FAILOVER USING SESSION-BASED
ROUTING**(52) **U.S. CL.**CPC *H04L 45/22* (2013.01); *H04L 45/28*
(2013.01); *H04L 45/028* (2013.01)(71) Applicant: **Juniper Networks, Inc.**, Sunnyvale,
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ABSTRACT(72) Inventors: **Hemachandran Karnam Mohan**,
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Techniques are disclosed for management of communication sessions of network traffic between client devices and the use of an up-to-date session state to enable seamless failovers between routers. One example technique may prepare each backup router to resume sessions of the active router in event of a failover and cause a redirection of the network traffic to complete the failover to a backup router. In a hot-switchover example, a network device known as a session controller synchronizes the session state information to backup router prior to failure and then, causes the network traffic to be redirected to backup router in response to the active router failure. In a warm-switchover example, the same session controller selects a backup router dynamically after detecting failure to active router, synchronizes session state information to backup router, and trigger routing updates, causing the network traffic to be redirected to the backup router.

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