Synthesis of BI 201302

**Significance:** The synthesis of the HCV protease inhibitor BI 201302 features an efficient ruthenium-catalyzed ring-closing metathesis reaction (0.1–0.2 M) requiring only 0.1 mol% of the Grela catalyst to generate the 15-membered macrocycle. This enhanced efficiency was achieved by installing a Boc substituent on the nitrogen of fragment D.

**Comment:** The S_N Ar reaction using a phenylsulfonyl leaving group in quinoline derivative H was more efficient than the reaction with the corresponding chloride (92% vs 40% yield). Potassium 3,7-dimethyl-3-octanoate (KDMO) was used as a base instead of t-BuOK because transcarbamoylation byproducts (1–2%) were easily removed by crystallization.