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Review text:

It is known that every ring R has a structure of $R \otimes R^{op}$-module, where R^{op} denotes the opposite ring of R, and that the (two-sided) ideals of R are exactly the submodules of R as $R \otimes R^{op}$-module. Regarding R as a $R \otimes R^{op}$-module a classical Goldie theorem, see [1], states that an ideal I of R has finite Goldie (or uniform) dimension if and only if there exists a family of uniform ideals $\{I_i\}_{i=1}^{n}$ of R contained in I whose sum is direct and essential in I. Moreover, any direct sum of nonzero ideals of R contained in I has at most n summands, and therefore any direct sum of n nonzero ideals of R contained in I is essential and every summand is a uniform ideal of R.

In the paper under review the authors give an independent proof of this result.

References

[1] Fernández López, Antonio and Tocón Barroso, María Isabel. *Pseudocomplemented semilattices, Boolean algebras, and compatible products*. Journal of Algebra, **(242)**(1): 60–91,2001.