$$\sum_{n=1}^{\infty} \frac{(-1)^{n(k+1)}}{F_n F_{n+1} \cdots F_{n+2k+1}} = \frac{1}{(F)_{2k}} \sum_{j=0}^{2k} (-1)^{\frac{1}{2}j(j+1)-jk} \left\{ {2k \atop j} \right\} A_{2k-j+1}$$

$$(6.7) \qquad - \frac{1}{(F)_{2k}} \sum_{j=0}^{2k} (-1)^{\frac{1}{2}j(j+1)-jk} \left\{ {2k \atop j} \right\}$$

$$\cdot \sum_{n=1}^{j} \frac{(-1)^n}{F_n F_{n+2k-j+1}} ,$$

where now $\left\{ {2k \atop j} \right\}$ and A_{2k-j+1} are expressed in terms of Fibonacci numbers.

REFERENCE

1. Brother Alfred Brousseau, "Summation of Infinite Fibonacci Series," Fibonacci Quarterly, Vol. 7 (1969), pp. 143-168.

[Continued from page 476.]

ρ = 1 stems from its application to the partitioning of integers into distinct Fibonacci numbers. These applications are investigated in the papers listed in References. When ρ is a root of unity, series (1) again has partition — theoretic congruence which we exploited to some extent in Section 5.

REFERENCES

1. L. Carlitz, "Fibonacci Representations," Fibonacci Quarterly, Vol. 6, 1968, pp. 193-220.
2. L. Carlitz, "Fibonacci Representations — II," Fibonacci Quarterly, Vol. 8, 1970, pp. 113-134.
3. H. H. Ferns, "On Representations of Integers as Sums of Distinct Fibonacci Numbers," Fibonacci Quarterly, Vol. 3, 1965, pp. 21-30.
4. V. E. Hoggatt, Jr., and S. L. Basin, "Representations by Complete Sequences," Fibonacci Quarterly, Vol. 1, No. 3, pp. 1-14.
5. D. A. Klarner, "Representations of N as a Sum of Distinct Elements from Special Sequences," Fibonacci Quarterly, Vol. 4, 1966, pp. 289-306.