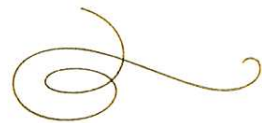


United  
States  
of  
America



*To Promote the Progress*

*of Science and Useful Arts*

*The Director*

*of the United States Patent and Trademark Office has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.*

*Therefore, this United States*

*Patent*

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

*Ander Lane*

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



US010422057B2

(12) **United States Patent**  
**Şençöpur**

(10) **Patent No.:** **US 10,422,057 B2**  
(45) **Date of Patent:** **Sep. 24, 2019**

(54) **KNITTING YARN AND METHOD OF FORMING A KNITTED PRODUCT**

(58) **Field of Classification Search**  
CPC ... D04B 3/00; D04B 3/02; D04B 3/04; D04B 5/00; D04B 1/02; D04B 1/025; D04B 1/04; D04B 1/12

(71) Applicant: **YÜNTEKS TEKSTİL SANAYİ VE TİCARET LİMİTED SİRKETİ**, Isparta (TR)

(Continued)

(72) Inventor: **Mehmet Abdullah Şençöpur**, Isparta (TR)

(56) **References Cited**

U.S. PATENT DOCUMENTS

(73) Assignee: **YÜNTEKS TEKSTİL SANAYİ VE TİCARET LİMİTED SİRKETİ**, Isparta (TR)

167,563 A \* 9/1875 Polle et al. .... D04B 3/00 66/1 A  
1,318,465 A \* 10/1919 Seifarth ..... D04B 39/00 66/4

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(Continued)

OTHER PUBLICATIONS

(21) Appl. No.: **16/025,266**

Y.E. El Mogabzy, Integrating the Design and Manufacture of Textile Products, (2009) Woodhead Publishing Series in Textiles, Chapter 9.3.3, pp. 255-258. (Year: 2009).\*

(22) Filed: **Jul. 2, 2018**

(65) **Prior Publication Data**  
US 2018/0305845 A1 Oct. 25, 2018

*Primary Examiner* — Danny Worrell  
(74) *Attorney, Agent, or Firm* — Gokalp Bayramoglu

**Related U.S. Application Data**  
(63) Continuation-in-part of application No. 15/726,781, filed on Oct. 6, 2017, now abandoned.

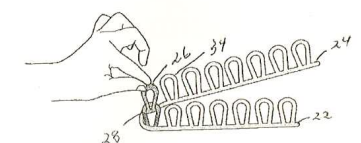
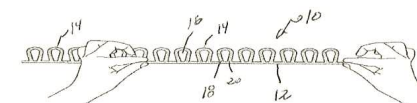
(57) **ABSTRACT**

**Foreign Application Priority Data**  
Mar. 27, 2017 (TR) ..... a 2017 04579

A method of manually forming a knitted product without tools includes forming a knitting yarn having a thread with a plurality of loops extending outwardly of the thread in spaced relationship to each other, arranging the knitting yarn into a plurality of rows, threading one loop of the plurality of loops of one of the plurality of rows through an interior of another loop of the to another loop of another plurality of rows, and repeating the steps until the knitted product is formed. The knitting yarn has a thread and a plurality of loops affixed to or formed with the thread. These loops are in spaced relationship to each other along the length of the thread. The loops extend outwardly of only one side of the thread.

**12 Claims, 3 Drawing Sheets**

(51) **Int. Cl.**  
**D04B 1/04** (2006.01)  
**D02G 3/34** (2006.01)  
(Continued)  
(52) **U.S. Cl.**  
CPC ..... **D04B 1/04** (2013.01); **D02G 3/34** (2013.01); **D02G 3/44** (2013.01); **D04B 1/22** (2013.01); **D04B 3/00** (2013.01)



### Maintenance Fee Notice

If the application for this patent was filed on or after December 12, 1980, maintenance fees are due three years and six months, seven years and six months, and eleven years and six months after the date of this grant, or within a grace period of six months thereafter upon payment of a surcharge as provided by law. The amount, number and timing of the maintenance fees required may be changed by law or regulation. Unless payment of the applicable maintenance fee is received in the United States Patent and Trademark Office on or before the date the fee is due or within a grace period of six months thereafter, the patent will expire as of the end of such grace period.

### Patent Term Notice

If the application for this patent was filed on or after June 8, 1995, the term of this patent begins on the date on which this patent issues and ends twenty years from the filing date of the application or, if the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121, 365(c), or 386(c), twenty years from the filing date of the earliest such application ("the twenty-year term"), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b), and any extension as provided by 35 U.S.C. 154(b) or 156 or any disclaimer under 35 U.S.C. 253.

If this application was filed prior to June 8, 1995, the term of this patent begins on the date on which this patent issues and ends on the later of seventeen years from the date of the grant of this patent or the twenty-year term set forth above for patents resulting from applications filed on or after June 8, 1995, subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b) and any extension as provided by 35 U.S.C. 156 or any disclaimer under 35 U.S.C. 253.



US010422057B2

(12) **United States Patent**  
**Şençopur**

(10) **Patent No.:** **US 10,422,057 B2**  
(45) **Date of Patent:** **Sep. 24, 2019**

(54) **KNITTING YARN AND METHOD OF FORMING A KNITTED PRODUCT**

(71) Applicant: **YÜNTEKS TEKSTİL SANAYİ VE TİCARET LIMITED SİRKETİ**, Isparta (TR)

(72) Inventor: **Mehmet Abdullah Şençopur**, Isparta (TR)

(73) Assignee: **YÜNTEKS TEKSTİL SANAYİ VE TİCARET LIMITED SİRKETİ**, Isparta (TR)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(Continued)

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(58) **Field of Classification Search**

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(Continued)

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(Continued)

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*Primary Examiner* — Danny Worrell

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**12 Claims, 3 Drawing Sheets**

