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BSF Enterprise PLC
("BSF" or the "Company")

BSF Expands into Humanoid Robotics Market

- **Platform Expansion into Robotics & Physical AI:** Deploying 3DBT's proprietary tissue-assembly architecture into humanoid robotics designed to address outer-covering and sensor integration challenges for articulating hands.
- **Synergy with Validated Luxury Materials:** Underpins the monolithic, stitchless 3D tissue technology currently executed under contracted, partner-funded commercial evaluation programmes with leading global luxury fashion houses via Lab-Grown Leather Ltd.
- **Capital-Light Partner-Funded Model:** Commercial development to be advanced through OEM Joint Development Agreements (JDAs), seeking partner-funded integration to protect central cash runway.

London, UK — 2 November 2026 — BSF Enterprise PLC (LSE: BSFA, OTCQB: BSFAF), an operational biotechnology platform developing and commercialising cell-based tissue engineering and biomaterial solutions, is pleased to announce that it is extending its proven tissue-engineering architecture into humanoid robotics and physical AI, designed to address the outer-covering and tactile sensor integration challenges facing volume robotics manufacturing.
BSF's wholly owned subsidiary, 3D Bio-Tissues Limited ("3DBT"), has filed a priority patent application with the UK Intellectual Property Office (UKIPO) titled "Tissue Assembly Method and/or Tissue Assembly" (application number GB2622781.9), with a priority date of 28 September 2026.
In addition to its active deployment in luxury biomaterials, the patent application describes seamless outer coverings for humanoid robot hands, articulating digits, and their integration over tactile sensor arrays.

Platform IP Synergy: Translating Strategic IP into new Verticals

This filing marks a strategic milestone in BSF's hub-and-spoke commercialisation model, establishing a vertically integrated IP estate that bridges foundational cell growth with high-value finished component manufacturing:

- **Foundational Upstream Media (The Production Engine):** Built upon 3DBT's proprietary macromolecular crowding (MMC) which recently received a Notice of Allowance across 17 claims by the USPTO (US application 18/578,286) covering scalable skin, corneal, and extracellular matrix production.
- **Validated Downstream Application (Luxury Biomaterials):** The monolithic 3D tissue-assembly platform covered by this new filing underpins the commercial development work underway within subsidiary Lab-Grown Leather Ltd. LGL is actively deploying this stitchless, 3D-moulded matrix architecture under contracted, partner-funded commercial evaluation programmes with two premier tier-1 global luxury fashion houses.
- **Advanced Technology Expansion (Humanoid Robotics & Physical AI):** Expanding beyond sustainable luxury materials, 3DBT is leveraging this proven 3D-moulding capability to address a major mechanical bottleneck in physical artificial intelligence: providing durable, seamless, bio-compatible external coverings for humanoid robotic hands.

The Robotics Industry Bottleneck: Seamless Bio-Tactile Interface

As global robotics developers transition autonomous humanoid platforms from prototype testing to industrial fleet deployment, robotic hands and end-effectors have emerged as the primary mechanical barrier. Conventional outer coverings—reliant on vulcanised synthetic silicones or multi-part glued elastomers—suffer from adhesive seam failure under continuous friction, restrict joint articulation, and severely damp high-frequency tactile and thermal sensor arrays.
The 3D assembly method described in the patent application is designed to address these issues through:

- **Monolithic Variable Thickness:** Moulded as a single continuous piece engineered with variable density - providing robust, footwear-grade wear resistance over finger pads transitioning seamlessly

into ultra-flexible 0.3 mm tissue over articulating joints without binding motor actuators.

- **Tactile Signal Coupling:** Formed from native extracellular collagen, the matrix provides a compliant mechanical interface engineered to transmit contact forces directly to underlying sensor arrays without the bulk stiffness of heavy synthetic rubbers.
- **Ambient Processing:** Unlike synthetic elastomers that require high-temperature vulcanisation cycles, 3DBT's biological matrix is formed and crosslinked at ambient physiological temperatures (<40°C), avoiding thermal stress during component integration.



Figure 1: Illustrative 3D rendering demonstrating the conceptual application of a seamless, variable-thickness tissue covering over an articulated robotic digit, showing the reinforced contact pad tapering to an ultra-thin joint membrane. (Render for illustrative purposes only; depicts design concept and not an existing commercial product.)

Capital-Light Commercial Delivery Model

In line with BSF's disciplined capital allocation strategy, the commercialisation of 3DBT's robotic skin platform will follow a partner-funded B2B model:

- **Joint Development Agreements (JDAs):** BSF intends to seek JDAs under which tier-1 robotics original equipment manufacturers (OEMs) and automation developers would fund application-specific CAD tooling, sensor integration, and durability benchmark testing.
- **IP Protection:** 3DBT retains 100% legal ownership of its foundational synthesis IP, cell lines, and proprietary media formulations (CityMix® / CytoBoost™).
- **Component Supply Annuity:** Would position 3DBT as a component supplier delivering custom-moulded bio-tactile digits and hand coverings as commercial humanoid fleets scale.



Figure 2: Illustrative concept of a monolithic bio-dermal sleeve overlaying an articulated robotic hand mechanism during object manipulation. (Render for illustrative purposes only; depicts design concept and not an existing commercial product.)

Executive Commentary

Dr. Che Connon, Chief Executive Officer of BSF Enterprise PLC, commented:

> *"Our core objective across BSF is taking breakthrough tissue-engineering intellectual property originated in our laboratories and driving it into high-margin, scalable commercial markets.*
> *"This priority patent filing demonstrates the sheer versatility of 3D Bio-Tissues' platform. The exact same monolithic, stitchless 3D tissue architecture that we are currently executing under funded commercial programmes with global luxury fashion houses via Lab-Grown Leather translates directly into solving the most demanding component challenge in modern humanoid robotics.*
> *"By eliminating seams, preserving sensor sensitivity, and allowing direct moulding over complex articulating joints, this technology positions 3DBT as an indispensable hardware partner for the emerging physical AI revolution. Crucially, we will execute this vertical via partner-funded development agreements, securing long-term high-margin component supply while protecting our group cash runway."*

Note: High-resolution illustrative figures referenced in this announcement are available to view in the official PDF version published on the Company's website at www.bsfenterprise.com/investors .

This announcement contains inside information for the purposes of Article 7 of Regulation (EU) No 596/2014 which is part of domestic UK law pursuant to the Market Abuse (Amendment) (EU Exit) Regulations 2019 (SI 2019/310).

Engage with the BSF Enterprise management team directly by asking questions, watching video summaries and seeing what other shareholders have to say. Navigate to our Interactive Investor website here:

https://bsfenterprise.com/link/yMdDJP

For further enquiries, please visit www.bsfenterprise.com or contact:

BSF Enterprise PLC Geoff Baker - Chairman Che Connon - CEO & Director We encourage all investors to share questions on this announcement via our investor website.	https://bsfenterprise.com/s/a1f22b
Bowsprit Partners (Financial Adviser & Broker) John Treacy James Sheehan	+44 (0)203 883 4430
ISIN of the Ordinary Shares is GB00BHNBDQ51. SEDOL Code is BHNBDQ5.	

About BSF Enterprise PLC

BSF Enterprise PLC (LSE: BSFA) is an operational life sciences platform committed to developing, acquiring, and commercialising high-potential biotechnology enterprises across cellular agriculture, sustainable biomaterials, and regenerative medicine. Through its hub-and-spoke operational model, BSF provides strategic leadership, central governance, and access to capital markets, translating laboratory innovations into commercial market opportunities.

The Group's portfolio includes:

- **3D Bio-Tissues Limited**: Core IP holding house, tissue engineering platform, and central manufacturing facility.

- **Lab-Grown Leather Limited**: Sustainable biomaterials company developing animal-free, tissue-engineered leather for luxury and automotive applications.
- **Kerato Limited:** Pre-clinical biotechnology venture developing advanced biomaterials and regenerative therapies for corneal repair and vision restoration.
- **milieu.bio Limited:** Dedicated consumables subsidiary supplying proprietary macromolecular crowding media supplements to biopharma, cell therapy, and cellular agriculture markets.

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